

IMPERIAL GAZETTEER

BENGAL,

ORISSA DIVISION.



Calcutta:

‘BENGAL SECRETARIAT PRESS.’

1907.

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ORISSA DIVISION.

CONTENTS.

	PAGE
Orissa Division	1
Cuttack District	4
Boundaries, configuration, and hill and river systems	ib
Geology	5
Botany	6
Fauna	ib
Climate and temperature	ib
Natural calamities	7
History	ib
The people	ib
Their castes and occupations	8
Christian Missions	ib
General agricultural conditions	9
Chief agricultural statistics and principal crops	ib
Improvements in agricultural practice	ib
Cattle	ib
Irrigation	10
Minerals	11
Arts and manufactures	ib
Commerce	ib
Railways and roads	ib
Water communications	ib
Famine	12
District sub-divisions and staff	13
Civil and criminal justice	ib
Land revenue	ib
Local and municipal government	15
Public works	ib
Police and jails	16
Education	ib
Medical	ib
Vaccination	ib
Bibliography	ib
Cuttack Sub-division	17
Kendrapara Sub-division	ib

Cuttack District—concluded.

	PAGE.
Jajpur Sub-division	17
Alamgir Hill	ib
Assia	ib
Chatia	18
Cuttack Town	ib
False Point	19
Jajpur Town	ib
Kendrapara Town	20
Mahavinyaka	ib
Naltigiri	21
Palmyras Point	ib
Ratnagiri Hill	ib
Udayagiri	ib
Balasore District	ib
Boundaries, configuration and river system	ib
Geology	23
Botany	ib
Fauna	ib
Climate and temperature	ib
Natural calamities	24
History	ib
The people	ib
Their castes and occupations	25
Christian Missions	ib
General agricultural conditions	26
Chief agricultural statistics and principal crops	ib
Improvements in agricultural practice	ib
Cattle	27
Irrigation	ib
Minerals	ib
Manufactures	ib
Commerce	ib
Railways and roads	ib
Water communications	28
Famine	ib
District sub-divisions and staff	29
Civil and criminal justice	ib
Land revenue	ib
Local and municipal government	30
Police and jails	ib
Education	31
Medical	37

	PAGE.
Balasore District—concluded.	
Vaccination	31
<i>Bibliography</i>	ib
Balasore Sub-division	ib
Bhadrakh Sub-division	ib
Balasore Town	32
Ballapal	33
Bhadrakh Town	ib
Chandball	ib
Chandipur	34
Jaleswar	ib
Remuna	ib
Angul District	ib
Boundaries, configuration and hill and river systems ...	ib
Geology	35
Botany	ib
Fauna	ib
Climate	36
History	ib
The people.	37
Their castes and occupations	38
General agricultural conditions	ib
Chief agricultural statistics and principal crops ...	ib
Forests	39
Minerals	ib
<i>Arts and manufactures</i>	ib
Commerce	ib
Railways and roads	40
Famine	ib
District sub-divisions and staff	ib
Civil and criminal justice	ib
Land revenue	ib
Police and jails	41
Education	ib
Medical	ib
Vaccination	42
<i>Bibliography</i>	ib
Angul Sub-division	ib
Khondmals	ib
Angul Village	43
Phulbani	ib
Puri District	ib
Boundaries, configuration and river system ...	ib

Puri District—concluded.					PAGE
Geology	...	...	...	...	44
Botany	...	...	...	...	45
Fauna	...	...	...	...	46
Climate and temperature	...	...	...	...	46
Natural calamities	...	...	...	...	46
History	...	...	...	...	46
Archæology	...	...	...	...	47
The people	...	...	...	...	46
Their castes and occupations	...	...	...	...	46
General agricultural conditions	...	...	...	...	48
Chief agricultural statistics and principal crops	...	...	...	...	46
Improvements in agricultural practice	...	...	...	...	46
Cattle	...	...	...	...	49
Irrigation	...	...	...	...	46
Forests	...	...	...	...	46
Minerals	...	...	...	...	46
Arts and manufactures	...	...	...	...	46
Commerce	...	...	...	...	46
Railways and roads	...	...	...	...	50
Famine	...	...	...	...	46
District sub-divisions and staff	...	...	...	...	51
Civil and criminal justice	...	...	...	...	46
Land revenue	...	...	...	...	46
Local and municipal government	...	...	...	...	52
Police and jails	...	...	...	...	46
Education	...	...	...	...	46
Medical	...	...	...	...	53
Vaccination	...	...	...	...	46
Bibliography	...	...	...	...	46
Puri Sub-division	...	...	...	...	46
Khurda Sub-division	...	...	...	...	46
Bhubaneswar	...	...	...	...	54
Dhauli	...	...	...	...	55
Khandgiri	...	...	...	...	46
Khurda Village	...	...	...	...	56
Konarak	...	...	...	...	46
Puri Town	...	...	...	...	57
Satyabadi	...	...	...	...	62
Udayagiri	...	...	...	...	46
Cross-references (for Imperial Gazetteer only).	...	...	...	...	46

ORISSA DIVISION.

Orissa.—A Division of Bengal, extending from West Bengal to Madras and from the Chotā Nāgpur plateau to the Bay of Bengal, and lying between 19° 28' and 22° 4' N. and 82° 38' and 87° 31' E. The head-quarters of the Division are at Cuttack town, and it includes five Districts with area, population and revenue as shown below :—

District.	Area in square miles.	Population in 1901.	Demand for land revenue and cesses in 1903-04, in thousands of rupees.
Cuttack	3,654	2,062,758	18.91
Howrah	2,085	1,071,197	7.30
Angul	1,681	191,911	87
Puri	2,459	1,017,284	7.97
Sambalpur	3,551	659,971	1.86*
TOTAL	13,770	5,003,121	31.91

* Includes Rs. 4,500 (additional rate) and Rs. 19,500 (patwari cess).

In the report on the census of 1901, the area of Cuttack was shown as 3,620 square miles, of Balasore as 2,059 square miles, and of Puri as 2,472 square miles. The figures adopted above for Puri are taken from the Settlement Report, while those for Cuttack and Balasore were supplied by the Surveyor-General.

Sambalpur was transferred to Bengal from the Chhattīsgarh Division of the Central Provinces in 1905, two large zamindāris which were previously comprised within the District remaining attached to the Central Provinces.

The term Orissa, properly speaking, means the tract in which the speakers of Oriyā form the dominant people. During the period of British rule the name has been applied to the tract extending from the Chilka lake to the river Subarnarekhā, and comprising the 4 Districts first mentioned, and the Orissa TAINUARY STATES, a group of 24 feudatory States, with a population in 1901 of 3,173,395 and an area of 28,016 square miles. The Commissioner of Orissa is Superintendent of these States, in respect of which he exercises the powers of a Sessions Judge and High Court.

The population of the Division increased from 3,551,871 in 1872 to 4,309,923 in 1881, to 4,666,227 in 1891 and to 5,003,121 in 1901. The density is 363 persons to the square mile

compared with 438 in Bengal as a whole. In 1901 Hindus constituted 95·5 per cent. of the population; there were only 106,889 Muhammadans, 90,038 Animists and 5,751 Christians.

The four Districts first mentioned occupy a narrow alluvial tract between the sea and the Chotā Nāgpur plateau, while Sambalpur, lying in the valley of the Mahānadi, is separated from them by a broken hilly tract and from the Chattoisgarh plain on the west by a jungle-covered range of hills. The Division possesses a language of its own and a system of castes differing alike from those of Bengal and of Madras. Oriyā is also spoken over a considerable area in the northern Districts of Madras and in the adjoining parts of the Central Provinces and of Chotā Nāgpur, while it has largely modified the Bengali of south Midnapore; the distinctive Oriyā castes are also well represented for a considerable distance beyond the borders of the Division.

At the dawn of history Orissa formed part of the powerful kingdom of Kalingā, which stretched from the mouths of the Ganges to those of the Godāvari. It was conquered by Asoka, but by 150 B.C. had again passed to the Kalingā kings. Jainism was then beginning to spread in the land, but about the second century A.D. it was succeeded, according to Buddhist tradition, by the latter creed, which was still flourishing in 640 A.D. Subsequently the power of the Kalingā dynasty declined, and Orissa seems to have become independent. In 610, however, an inscription of Sasānka, king of Magadha, claims it as a part of the dominions of that monarch, and in 640 it was conquered by Harshavardhana of Kanauj. In the 10th and 11th centuries Orissa is said to have been under the rule of the Kesari kings, to whose rule are ascribed the Saiva temples at BHUBANESWAR and most of the ruins in the Altī hills, but the existence of such a dynasty is uncertain. Then followed the dynasty founded by Chora Gangā of Kalingānagar. These kings were of the Vaishnava faith; they built the famous temple of Jagannāth at Puri and the black pagoda of KONARAK. There were frequent wars with the Muhammadans, and about 1361 the emperor Fīroz Shāh conducted an inroad into Orissa in person. In 1434 Kapileswar Deva of the Solar line usurped the throne. He extended his dominions to the south, where Muhammadan inroads had subverted the old order of things, as far as the Penner river, but his successors were gradually shorn of these additions by the Musalmān rulers of Golconda. From the north also the onset of the Muhammadans became more and more insistent, and at last in 1568, after a period of civil war, the last Hindu king, a usurper of the name of Mukund Deo, was overthrown by Kāla Pāhār, the general of Sulaimān Kāsarānī. Orissa (including Midnapore) remained in the possession of the Afghāns till 1592, when Mān Singh annexed it. It was placed under separate governors, but Midnapore and

Balasore were subsequently transferred to Bengal. In 1751 Ali Vardi Khān ceded the province to the Bhonslas of Nāgpur, in whose possession it remained until its conquest by the British in 1803. The Marāthās made no attempt to establish any civil administration, and their rule was confined to a periodic harrying of the country by their cavalry, who extorted whatever they could from the people. In 1804 a board of 2 Commissioners was appointed to administer the province, and in the following year it was designated the District of Cuttack and placed in charge of a Collector, Judge and Magistrate. In 1828 it was split up into the 3 Regulation Districts of Cuttack, Balasore and Puri and into the non-Regulation Tributary States. As already explained, Sambalpur has only recently been attached to Orissa; and an account of its history, which differs in several respects from that of the rest of the Division, will be found in the article on that District.

Orissa has on more than one occasion suffered from disastrous famines; and within recent times it was devastated by the memorable calamity of 1865—67. The full extent of the crop failure consequent on the scanty rainfall of 1865 and the exhaustion of the local food supplies was not realised by the authorities in time, and, when at last, in June 1866, an effort was made to provide the starving population with food, the south-west monsoon prevented the ships, lying laden with grain in the port of Calcutta, from reaching the stricken tract. It is said that a quarter of the population died of starvation and of the diseases that supervened. Orissa has now been made accessible by the East coast section of the Bengal-Nāgpur Railway which connects it with Calcutta and Madras, and Cuttack and portions of Balasore have been provided with an elaborate and costly system of irrigation known as the ORISSA CANALS system.

The Districts of the Orissa Division are temporarily settled, and a resettlement of all the eastern Districts, except Angul, has recently (1889—99) been effected. The area brought under assessment was 2,950 square miles, against 2,212 square miles at the previous settlement of 1837, and the revenue was 21·05 lakhs or R. 1-1-10 per acre, compared with 13·84 lakhs, or R. 1-15-7 on the previous occasion. The rents payable by tenants were fixed in the course of the settlement operations; they work out on an average to Rs. 2-1 per acre. The term of the last settlement of Sambalpur expired in 1902, and the District is under resettlement.

The Division contains 7 towns and 15,416 villages. The largest towns are CUTTACK (51,361), PURI (49,334) and BALASORE (20,880). There are ports at FALSE POINT, CHANDBALI, Balasore and Puri, and the value of the imports and exports in 1903-04 was 28·0 lakhs and 53·8 lakhs respectively.

The temple of Jagannāth at Puri is well known, and the town contained at the time of the census of 1901 over 17,000 pilgrims. Other famous antiquities are the Lingarāj temple at Bhubaneswar, the black pagoda at Konārak, several temples at JASPUR and the caves in the KHANDGIRI and UDAYAGIRI hills. [Rajendra-lāla Mitra, *Antiquities of Orissa*, Calcutta, 1875, 1886; Stirling, *Account of Orissa proper or Cuttack*, Serampore, 1822, reprinted in Calcutta, 1904; Sir W. W. Hunter, *Orissa*, 1872; G. Toynbee, *History of Orissa from 1803 to 1828*, Calcutta, 1873; S. L. Maddox, *Final Report on the Survey and Settlement of the Province of Orissa*, Calcutta, 1900; also several papers by Monmohan Chakravarti in the *Journal of the Asiatic Society of Bengal*, vol. lxi, pp. 43—49 and pp. 1044—1109, vol. lxii, pp. 88—109, vol. lxiv, pp. 128—154, vol. lxvi, pp. 317—348, vol. lxvii, pp. 328—386.]

Bound-
aries, con-
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Cuttack District.—District in the Orissa Division of Bengal, situated between $20^{\circ} 2'$ and $21^{\circ} 10' N.$, and $85^{\circ} 20'$ and $87^{\circ} 1' E.$, with an area of 3,654* square miles. It is bounded on the north by the Baitarani river and Dhāmra estuary, which separate it from Balasore District; on the east by the Bay of Bengal; on the south by Puri; and on the west by the Tributary States of Orissa.

Cuttack consists of three distinct tracts: the first is a marshy jungle-covered strip along the coast, from 3 to 30 miles in breadth; the second, an intermediate arable tract of rice land in the older part of the Mahānadi delta; and the third, a broken hilly region along the western boundary. The marshy strip on the coast resembles the Sundarbans as regards its swamps, dense jungle and noxious climate, but lacks the noble forest scenery of the Gangetic tract; it is intersected by innumerable streams and creeks, whose sluggish waters deposit their silt, and form morasses and quicksands. The arable plains stretch inland for about 40 miles and are intersected by the large rivers which emerge from the western mountains and throw out in every direction a net-work of branches, which, after innumerable twists and interlacings, frequently rejoin the parent stream as it approaches the sea. The third tract consists of a series of ranges, seldom exceeding 10 to 15 miles in length, with thickly wooded slopes and lovely valleys between. Elsewhere only a few isolated peaks break the evenness of the plains. The chief of these are NALTIGIRI with its sandal trees and Buddhist remains; UDAYAGIRI with its colossal image of Buddha, sacred reservoir and ruined temples and caves; and ASSIA, the highest hill in the District (2,500 feet), with its old mosque. The MAHAVINYAKA peak has for ages been consecrated to the worship of Siva.

* The area shown in the Census Report of 1901 was 3,629 square miles. The area shown above is that now reported by the Surveyor-General.

west of Cuttack are formed of coarse grits, sandstones and conglomerates with subordinate white or pinkish clay belonging to the Gondwana system.*

Botany. In the Mahanadi delta swampy places on the banks of rivers and creeks near the sea have the vegetation of a mangrove forest. Where sand-dunes intervene between the sea and the cultivated land behind, an equally characteristic littoral vegetation is met with, the principal species being *Spinifex*, *Hydrophyllax*, and *Geniosporum prostratum*. The cultivated land bears the usual rice-field weeds, while ponds and ditches are filled with floating water-weeds or submerged water-plants. Near human habitations shrubberies of semi-spontaneous origin are common. This undergrowth is loaded with a tangled mass of climbing *Convolvulaceae*. The arborescent portion of the village shrubberies includes the red cotton tree (*Bombax malabaricum*), jayal (*Odina woderi*), *Tamarindus indica*, *Moringa*, *Pterygosperma*, pipal (*Ficus religiosa*), banyan (*Ficus bengalensis*), tãri (*Borassus flabellifer*) and khajũr (*Phoenix sylvestris*). There are no forests, but in the north-west especially are found other species of a more truly forest character, among them being *Ailanthus excelsa*, *Pterocarpus marsupium*, *Pterospermum Heyneanum*, *Dalbergia paniculata* and *Dalbergia lanceolaria*, *Adina cordifolia*, *Schleichera trynga* and the like. The usual bamboo is *Bambusa arundinacea*. Open glades are filled with grasses, sometimes of a reedy character. Sedges are abundant and ferns are fairly plentiful.

Fauna. Tigers, bears, leopards, wild buffaloes, antelopes, spotted deer, hog deer, hyenas, jackals, foxes and wild hogs are found. Fish-eating and man-eating crocodiles abound in all the rivers and creeks, and grow to a very large size. Comparatively little loss of life is caused by tigers and leopards, as these animals are confined chiefly to the dense jungles on the coast, or to the hilly portion of the District, where the population is sparse and where deer and hog supply them with sufficient food.

Climate and temperature. The District is directly on the track of the cyclonic storms which cross Orissa frequently during the monsoon season, and the extremes of climate are more marked than in most other parts of Bengal. In April and May the average maximum is 102°. The mean temperature falls from 88° in the hot season months to 83° in the monsoon season and to 69° in February. Owing to the occasional dry westerly winds in the hot season and to the later well-marked south-west monsoon conditions, humidity undergoes considerable variation, ranging on an average from

* Memoirs, Geological Survey of India, vol. I, part III, "On the Geological Structure and Physical Features of the Districts of Bankura, Midnapore and Orissa," and Records, Geological Survey of India, vol. V, "Sketch of the Geology of Orissa," by W. T. Blanford.

The salient statistics of the census of 1901 are reproduced below:—

SUB-DIVISION.	Area in square miles.	NUMBER OF		Population.	Population per square mile.	Percentage of variation in population between 1801 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Cuttack	1,503	1	2,590	1,035,375	683	+6.1	79,870
Kendrapāra	977	1	1,338	467,081	478	+8.7	86,133
Jāipur	1,116	1	1,680	600,403	533	+6.6	43,974
DISTRICT TOTAL	3,596	3	5,617	2,002,758	555	+6.5	159,988

The towns are CUTTACK, the head-quarters, JĀIPUR and KENDRAPARA. The population is sparse on the lower slopes of the hills and also on the sea coast, but between these two extremes the area under cultivation is great and the population dense, rising in Sālipur thāna to 933 to the square mile, whereas Aul on the sea coast has only 298, and the hilly Bānki only 377. There is a large emigration to the sparsely inhabited native States to the west and to the neighbouring Districts of Balasore and Puri. Large numbers go to the metropolitan Districts where they serve as palanquin bearers, door keepers and labourers; natives of the District are also found as cooks and domestic servants throughout Bengal, and as cultivators and field labourers in the Sundarbans, while many have migrated to Assam and the United Provinces. The language of the District is Oriyā. Hindus number 2,002,573, or 97 per cent. of the population, and Musalmāns 57,356, or 2.8 per cent.

The chief castes are Brāhmans (195,000), Khandaits (375,000), Chāsas (266,000), Gauras (140,000), Kāndras (92,000) and Pāns (103,000). The Khandaits and Chāsas are practically confined to Orissa; these castes, between whom there is but a thin line of separation, often overstepped by the accession of wealth, are almost entirely agricultural. The Gauras are the herdsmen of Orissa, while the Kāndras are a low caste who in former days with the Pāns formed the rank and file of the local militia; they are now usually day-labourers or village *chaulidārs*. Agriculture supports 58.5 per cent. of the population, industries 18.3 per cent. and the professions 2.6 per cent.

Of 2,652 Christians (1901) 2,204 are natives. Most of these are the adherents of a Baptist mission which has been at work since 1822, and which now employs 8 missionaries and 3 Evangelists. It maintains a high school affiliated to the Calcutta University, a European high school, an orphanage for boys and girls, and a printing press. A Roman Catholic mission founded in 1845 maintains in Cuttack town a chapel, a church, a convent

Their
castes and
occupa-
tions.

Christian
missions.

the sea-board, the ground retains little moisture during the hot weather. Rinderpest and foot-and-mouth disease are somewhat prevalent.

Irrigation. The greater part of the ONISSA CANALS system lies within the District. The Māchgaon canal leaves the Tāldanda canal 7 miles south of Cuttack, and runs along the north bank of the Kātjuri and of its branch the Alankā for a distance of 32 miles. It has a discharge of 776 cubic feet per second and commands about 152 square miles. The Tāldanda canal starts from the right bank of the Mahānadi immediately above the anicut and runs in a south-eastern direction to Birbāti, where it gives off the Māchgaon branch. Thence it runs along the southern bank of the Sukpaikā and the Mahānadi for a total length of 52 miles. It has a discharge of 1,342 cubic feet per second, of which about half is taken off by the Māchgaon canal, and it commands 117 square miles. The Kendrāpāra canal has a total length of 39 miles and a discharge of 1,067 cubic feet per second. The area commanded by it is 169 square miles, and its 23 distributaries are capable of watering 152 square miles. Its branch, the Gobri canal, has a total length of 15 miles and commands 33 square miles, but the distributaries constructed can only irrigate 14 square miles. The Gobri extension is only 6 miles long but commands an area of 50 square miles, of which, however, only 12 square miles can be irrigated by the distributaries constructed. The Patāmundai canal, branching off from the Kendrāpāra canal just below the Birūpā head-works, skirts the southern bank of that river and of the Brāhmaṇī river for a total length of 47 miles. It has a discharge of 885 cubic feet per second and commands an area of 80 square miles, its distributaries being capable of irrigating 69 square miles. The High-level canal forms part of the original scheme for connecting Puri with Calcutta. It consists of 3 ranges, of which the first and the second, covering a total distance of $46\frac{1}{2}$ miles, lie in this District. It is very picturesque, skirting the base of the wooded hills along the western boundary. The two ranges command an aggregate area of 92 square miles, of which, however, only a small proportion is actually irrigated. The Jājpur canal starting from the head-works at the point of bifurcation of the Baītarani runs $6\frac{1}{2}$ miles to the town of Jājpur. It has a discharge of 7,000 cubic feet per second and it commands 109 square miles. The total area irrigated from Government canals in 1903-04 was 266 square miles, practically all under rice. The rainfall is usually ample, and the value of canal irrigation lies less in the improvement which it may render possible in the outturn of an ordinary year than in the protection which it affords against a failure or partial failure in years of drought. Well-water is used only for the irrigation of garden crops and betel plantations. No tanks or other private works are used in ordinary seasons, but in times of

drought the winter rice crop is irrigated from all available natural and artificial reservoirs; possibly one-eighth of the crop may be saved by these means.

Sandstone, laterite and rubble are quarried from the hills in the western borders, but only for the railway and local use. The soft decomposing gneiss is used for building purposes. Minerals.

The silver filigree work of the town of Cuttack is well-known. Cotton weaving is extensively carried on, and other manufactures are bell-metal work, lac and brass ornaments, pottery, hardware, gunny-bags and baskets; neat toys and sticks are turned from buffalo horn, deer horn and ivory, and are largely bought by the pilgrims who pass through the District. The other hand industries are of the primitive description found in other parts of Bengal. Arts and manufactures.

The chief exports are rice to Calcutta, Mauritius and Ceylon, oilseeds, hides, jute, timber, horns, lac, nux-vomica, beeswax, resin, and silver filigree work to Calcutta, and bones to Calcutta and Ganjam. The chief imports are piece-goods, kerosene oil, crockery, glassware, fancy goods, metals, yarn, betel-nuts and spices from Calcutta, salt from Calcutta and the Madras Presidency, jungle products, grain and oilseeds from the Tributary States and the Central Provinces, and spices and condiments from Ganjam. The local trade is mainly in the hands of the Baniya, Peli, Kowat, Guriya, Patra and Gola castes. The chief trade centres are Cuttack, False Point port, and Chandbali, which is situated just outside the District. In 1903-04 the exports from False Point port were 21 lakhs and the imports Rs. 6,000; practically the whole of this was foreign trade. Com-merce.

The Cuttack-Midnapore extension of the Bengal-Nagpur Railway intersects the District from north to south. The Orissa Trunk Road from Calcutta to Ganjam and the roads from Cuttack to Puri and Sambalpur are maintained from Provincial funds, their total length in the District being 61½ miles. In addition to these 32 miles of metalled and 732 miles of unmetalled roads, including 382 miles of village tracks, are maintained (1903-04) by the District board, the most important being those from Cuttack to Taldanda, Machgaon and Chandbali, and from Phulakhrā to Madhab. Feeder roads from the interior to stations on the railway are being gradually constructed with the help of Government grants. Railways and roads.

The rivers almost dry up during the hot weather in the upper reaches, while during heavy floods they become too dangerous for navigation. The anicuts constructed across them have also cut off direct communication from the upper to the lower reaches. The Mahanadi affords unobstructed communication above the anicut with Sambalpur, from which grain is brought down by boats during the rains, but the traffic has been diminishing since the opening up of Sambalpur by railway. In the lower tidal reaches Water communication.

boats are largely used. The Taldanda, Kendrapāra, Gobri, High-level and Jāipur canals are navigable, but their traffic has declined since the opening of the railway.

Steamers carrying passengers and goods ply 3 times a week from Cuttack to Chāndbali port by canal, and from Chāndbali to Calcutta by sea. Cargo steamers call at False Point at irregular intervals.

Famine.

Crops are liable in unprotected areas to loss from deficient or unevenly distributed rainfall and the uncontrolled river-floods. The great Bengal famine of 1770 was grievously felt in Orissa, but in recent times the great famine of 1865-66 is the only one comparable with that calamity. The rainfall of 1865 was scanty and ceased prematurely, so that the outturn of the great crop of winter rice, on which the country mainly depends, was reckoned at less than a third of the average crop. The gravity of the occasion was not perceived, and no special inquiries were instituted, while prices long remained so moderate that they offered no temptation to importers and forced no reduction in consumption on the inhabitants, till suddenly the province was found to be almost bare of food. In May 1866 it was discovered that the markets were so empty that the jail prisoners and the Government establishments could not be supplied. But the southern monsoon had now begun, and importation by sea or land became nearly impossible. Orissa was at that time almost isolated from the rest of India; the only road, leading to Calcutta across a country intersected by large rivers and liable to inundation, was unmetalled and unbridged; and there was very little communication by sea. By great exertions, the Government succeeded in importing about 10,000 tons of food grain by the end of November; and this was given away gratuitously, or sold at low rates, or distributed in wages to the starving population. But meanwhile the mortality among those whom this relief did not reach, or reached too late, had been very great; and it was estimated that nearly 1,000,000 persons had died. Though the general famine may be said to have come to an end in November, when the new crop began to come into the market great distress still continued in some parts of the country. The rainfall of the year was so heavy as to cause great floods in the river Mahānadi, and while the harvests in the higher lands were excellent, in all the low lands the inundations drowned the crop. Half the District was thus devastated; in January 1867 forty deaths a day from starvation were reported; and the work of relief had to be taken up again. Altogether about 40,000 tons of rice were imported and lavishly distributed; and about half had been disposed of, when the monsoon of 1867, followed by an unusually fine harvest, altogether put an end to the famine in 1868. No complete statistics of the numbers relieved and of the expenditure

incurred are available; but the mortality was estimated at one-fifth to one-fourth of the population and altogether nearly 1½ crores was expended in Orissa during this famine. Owing to the protection afforded by the irrigation works, no famine has since occurred.

For general administrative purposes the District is divided into 3 sub-divisions with head-quarters at CUTTACK, KENDRAPARA and JAJPUR. The Magistrate-Collector is ordinarily assisted at Cuttack by 6 Deputy Magistrate-Collectors, a sub-deputy collector and occasionally a Joint Magistrate. The Kendrapāra and Jajpur sub-divisions are in charge of Deputy Magistrate-Collectors, a sub-deputy collector being occasionally deputed to help them. A *tahsil kacheri* at Bānki, the head-quarters of the Government estate of that name, is in charge of a sub-deputy collector. Three Executive Engineers of the Public Works department are also employed within the District. In addition to the revenue staff mentioned above, a Deputy Collector with certificate powers is engaged in the collection of water-rates under the supervision of the Superintending Engineer of the Orissa Circle.

The jurisdiction of the District and Sessions Judge also extends over the Puri and Balasore Districts. Subordinate to him for civil work is a staff consisting of a Sub-Judge at Cuttack with jurisdiction over Puri and Balasore Districts also, and 4 Munsifs, of whom 2 are stationed at Cuttack and one each at Kendrapāra and Jajpur; additional Munsifs are also posted to these stations when necessary. In addition to the court of the District Magistrate, all the above mentioned stipendiary magistrates, except a Deputy Collector in charge of Excise and Income-tax, exercise magisterial powers. The district is singularly free from serious crime; the commonest offences are burglary and petty theft. In the early days of British administration Cuttack had an unenviable reputation for the number of murders committed; dacoities and cattle stealing on a large scale were common; and several cases of *sati* occurred annually.

The early Hindu rulers of Orissa recognized no middlemen between them and their subjects, and every cultivator was in theory bound to pay to his sovereign a share of the produce of his land. The nominal proportion was one-sixth, but in fact it widely varied and was often much more. The residents of each village paid their quota through a headman (*padhān*), who in consideration of the trouble of collection was allowed to hold a certain area rent-free. The village accounts were checked by an accountant called *hloi* who was also paid by a grant of land. The villages were grouped into large divisions of 10 to 50 square miles, each of which was called a *khand* or *bisi*, the prototype of the later Muhammadan *pargana*. Each division had an executive head, called *khandpati*, who with the divisional accountant,

District
sub-divi-
sions and
staff.

Civil and
justice.

Land
revenue.

called *bhoimāl* or *bishayi*, collected the revenue and handed it over to the head of the District, called *desadhipati*. The *khandpatis* and *bhoimāls* of the Hindu period became respectively the *chaudhris* and *kānungos* of the Muhammadan period. The village headman's designation was also changed to *mukaddam*, an Arabic term meaning headman. In early times every office had the tendency to become hereditary, and so too the offices of the *chaudhris* and *kānungos*, originally created for administrative purposes, gradually became quasi-hereditary tenures. The British Government put the final seal upon the proprietary character of the tenures by recognizing the occupants as the actual owners of the soil.

The *pargana* officials widely exercised the rights of gift and sale, and an enormous number of rent-free and rent-paying tenures were thus created. Some of the rent-free tenures were confirmed as such in the first regular settlement of the District, while the rest were resumed and either admitted to direct engagement with Government or left as dependent tenures in the parent estates, according to their size. Of the rent-paying tenures some had received the right of direct payment before the British conquest, while others remained included in the parent estates as dependent tenures; some of the *mukaddami* tenures also had been separated from the parent estates and admitted to direct engagement. The British Government confirmed as proprietors all those who were paying revenue direct into the state treasury. The tenures peculiar to Orissa include *mukaddami* and *sarbarābhāri* holdings, which are intermediate proprietary holdings held on payment to the zamindār of a rent fixed for the term of the settlement; the *lākhirāj bāzāfi* is a resumed revenue-free tenure, and the *kharidā jamābandi* a holding of land originally purchased as waste subject to payment of rent.

The British conquest of the District was followed by a series of short-term summary settlements which ended in 1837, when the first regular settlement was undertaken. At first made only for 30 years, that settlement was subsequently extended, owing to the great famine of 1865-66, for a further term of 30 years which expired in 1897. At the settlement for 30 years then effected the revenue demand from temporarily settled estates was raised from 7.14 to 10.99 lakhs. In a large number of estates the increases were imposed gradually, and the figure given above is the final revenue which will be payable from 1908. In 1903-04 the total current land revenue demand was 12 lakhs, of which Rs. 81,000 was payable by 13 permanently settled estates, 10.78 lakhs by 4,684 temporarily settled estates and the balance by 7 estates held direct by Government. At the last settlement the average size of each holding was 1.26 acres, but a tenant often has more than one holding, and the average area held by

each agricultural family is about 3.23 acres. The rent paid by the cultivator varies widely according to the quality of the soil. Good land growing tobacco and other valuable crops pays from Rs. 12 to Rs. 25 per acre, while inferior land producing a coarse pulse sometimes pays less than R. 1. The cultivators are broadly divided into two groups, *thāni* and *pāhi* ryots. *Thāni* is a corruption of *sthānt* or *sthāntya*, literally local, and the term was originally applied to every resident cultivator of a village. Its use is now restricted to the successors in interest of ancient resident ryots who were recorded as such in the first regular settlement of the District. All *thāni* ryots have occupancy rights under the Bengal Tenancy Act, and they pay no rent for their homesteads. *Pāhi* ryots have not these special privileges but they can acquire occupancy rights under the Bengal Tenancy Act. Neither class of ryots can transfer their holdings without the landlord's consent. The prevailing system of produce rent is called *dhuli-bhāg* (dust-share) from the fact that the entire produce, including the straw, is shared equally by the landlord and the tenant. When a fixed quantity of grain is taken as rent it is called *sanjā*. In both cases the cultivator pays the whole cost of cultivation.

The following table shows the collections of land revenue and of total revenue, under the principal heads, in thousands of rupees :—

		1880-81.	1890-91.	1900-01.	1903-04.
Land revenue	...	9,88	8,87	11,69	12,25
Total revenue	...	14,80	14,61	19,71	20,48

Outside the municipalities of CUTTACK, JAIPUR and KENDRA-PARA, local affairs are managed by the District board, to which sub-divisional local boards are subordinate. In 1903-04 its income was Rs. 1,72,000, of which Rs. 74,000 was derived from rates and the expenditure was Rs. 1,44,000, including Rs. 67,000 spent on civil works and Rs. 54,000 on education. Local and municipal Government.

Mention has been made of the chief roads and canals. In addition to these the embankments of the District are of considerable importance. From time immemorial certain tracts have been protected from inundation by embankments, and under British rule this protection has been systematized; large sums have been expended on the perfecting of the embankments, especially after the disastrous floods and famines of 1865-66. The law on the subject is contained in Act III of 1855. In 1904, 480 miles of embankments were maintained by Government, 265 miles in connection with the canals, and 215 miles along the banks of the large rivers. A light-house is situated at False Point. Public works.

Police and
jails.

The District contains (1904) 10 police stations and 14 out-posts, and the force subordinate to the District Superintendent of Police consists of 4 inspectors, 38 sub-inspectors, 41 head-constables and 439 constables; there is in addition a rural police force of 360 *daffudārs* and 3,585 *chaukidārs*. The District jail at Cuttack has accommodation for 409 prisoners, and subsidiary jails at Jājpur and Kendrapāra for 12 each.

Education.

In 1901, 7·7 per cent. of the population (15 males and 0·5 females) could read and write. The number of pupils under instruction increased from 40,674 in 1881-82 to 50,670 in 1892-93 and 55,465 in 1900-01, while in 1903-04, 60,257 boys and 3,739 girls were at school, being respectively 40·2 and 2·3 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year was 3,518, including an Arts college, 40 secondary schools, 3,277 primary schools and 200 other special schools. The most notable institution is the Ravenshaw college in Cuttack town, which also contains medical, survey and training schools maintained by Government, two schools for the education of Europeans and Eurasians, known respectively as the Protestant European school and the Saint Joseph's Convent (Roman Catholic), and 3 high schools. Of 52 girls' schools only two teach up to the middle scholarship standard, the rest being all of the primary class. The total expenditure on education in 1903-04 was 3 lakhs, of which Rs. 62,000 was met from Provincial funds, Rs. 52,000 from District funds, Rs. 3,000 from municipal funds and 1·5 lakhs from fees.

Medical.

In 1903 the District contained 15 dispensaries, of which 4 had accommodation for 96 in-door patients; at these the cases of 123,000 out-patients and 1,200 in-patients were treated, and 6,100 operations were performed. The expenditure was Rs. 41,200, of which Rs. 16,700 was met by Government contributions, Rs. 10,200 from local and Rs. 3,700 from municipal funds, and Rs. 10,400 from subscriptions. A lunatic asylum at Cuttack has accommodation for 43 male and 6 female lunatics.

Vaccin-
ation.

The District is exceptionally liable to small-pox epidemics, and the death-rate from this cause in 1900-01 amounted to 3·6 per mille. Since that year, however, the deaths from small-pox have largely decreased and were only 289 in 1904, as compared with 7,253 in 1901; this result being attributed to the action taken against professional inoculators of whom there were found to be 264 in the District. Vaccination is not compulsory except in municipal areas, but during 1903-04 the number of persons successfully vaccinated was 63,000 or 31·0 per thousand of the population.

[Sir W. W. Hunter, *Orissa*, 1872, and *Statistical Account of Bengal*, vol. xviii, 1877; A. Stirling, *Account of Orissa*, Serampore,

1822, reprinted in Calcutta, 1904; G. G. Toynebee, *Sketch of the History of Orissa from 1803 to 1828*, Calcutta, 1873; N. N. Banerji, *Report on the Agriculture of Cuttack*, Calcutta, 1893; S. L. Maddox, *Final Report on the Survey and Settlement of the Province of Orissa*, Calcutta, 1900; and L. S. S. O'Malley, *District Gazetteer*, Calcutta, 1906.

Cuttack Sub-division.—Head-quarters sub-division of the Cuttack District, Bengal, lying between $20^{\circ} 2'$ and $20^{\circ} 42' N.$, and $85^{\circ} 20'$ and $86^{\circ} 44' E.$, with an area of 1,562 square miles. Its population was 1,035,275 in 1901, compared with 981,991 in 1891. The west of the sub-division lies on the fringe of the Chotā Nāgpur plateau, while on the east it is bounded by the Bay of Bengal. The central tract is a fertile and densely populated plain intersected by the Mahānadi and its offshoots. The density for the whole sub-division is 663 persons to the square mile. It contains one town, CUTTACK (population 51,364), its head-quarters, and 2,599 villages.

Kendrapāra Sub-division.—North-eastern sub-division of the Cuttack District, Bengal, lying between $20^{\circ} 18'$ and $20^{\circ} 48' N.$, and $86^{\circ} 15'$ and $87^{\circ} 1' E.$, with an area of 977 square miles. Its population was 467,081 in 1901, compared with 429,770 in 1891. It is a deltaic alluvial tract bounded on the east by the Bay of Bengal and intersected by numerous rivers and streams. The tract along the coast is very sparsely populated, but the density rises towards the west, and the average for the whole sub-division is 478 persons to the square mile. It contains one town KENDRAPARA, its head-quarters (population 15,245), and 1,338 villages.

Jājpur Sub-division.—North-western sub-division of the Cuttack District, Bengal, lying between $20^{\circ} 39'$ and $21^{\circ} 10' N.$, and $85^{\circ} 42'$ and $86^{\circ} 37' E.$, with an area of 1,115 square miles. Its population was 560,402 in 1901, compared with 625,910 in 1891. The west of the sub-division lies on the fringe of the Chotā Nāgpur plateau, and this portion is very sparsely populated; towards the east, which consists of a fertile highly cultivated plain, the density increases, the average for the whole sub-division being 503 persons to the square mile. It contains one town JAJPUR, its head-quarters (population 12,111), and 1,580 villages.

Alamgir Hill.—Peak of the Assia range in the Jājpur sub-division of Cuttack District, Bengal, situated in $20^{\circ} 39' N.$ and $86^{\circ} 14' E.$ On the summit of the hill, 2,500 feet above the level of the surrounding country, stands the mosque of Takht-i-Sulaimān, a plain stone building consisting of a single room surmounted by a dome, built in 1719 by Shujā-ud-dīn, the Orissa deputy of the Nawāb Murshid Kuli Khān.

Assia.—Range of hills in the Jājpur sub-division of Cuttack District, Bengal, lying between $20^{\circ} 35'$ and $20^{\circ} 41' N.$ and $86^{\circ} 14'$ and $86^{\circ} 17' E.$, and containing interesting Buddhist,

Muhammadan and Hindu remains. The principal hills are ALANGIR, UDAYAGIRI, Baradihi, NALTIGIRI and the outlying peak of Amrāvati or CHATIA.

Chatia.—Hill in the Jajpur sub-division of Cuttack District, Bengal, situated in $20^{\circ} 39' \text{ N.}$ and $86^{\circ} 3' \text{ E.}$, on the Grand Trunk Road near the village of the same name. On the east side of the hill are the ruins of a fort called Amrāvati. The walls are made of laterite and are quadrangular, with one gate facing the east. The zanāna rooms are indicated by a high platform with broken pillars and on a smaller platform stood a temple, now fallen. On one of the platforms are two well carved life-size images of Indra and his wife Indrānī. According to local tradition, Amrāvati was one of the five *Katalas* or forts of the Kesari dynasty. On the west side of the hill is a small cave with a verandah, probably the work of Jain ascetics.

Cuttack Town (*Katala*, the fort).—Head-quarters of Cuttack District and the Orissa Division, situated in $20^{\circ} 29' \text{ N.}$ and $85^{\circ} 52' \text{ E.}$ on the peninsula formed by the bifurcation of the Mahānadi where it throws off the Kātjurī. The town first sprang into importance in the tenth century, when protecting dykes were built and a fort was constructed by the Hindu king Makar Kesari. An ancient fort, called Barabāti Kila, of undoubted Hindu origin is still one of the most conspicuous monuments in the town. Cuttack was the head-quarters of both the Mughal and the Marāthā administrations, and for many years after its occupation by the British gave its name to the whole province. The population which was 42,667 in 1872 and 42,656 in 1881 increased to 47,186 in 1891 and to 51,364 in 1901, including 4,810 persons in cantonments. In 1901 Hindus numbered 40,320, Muhammadans 8,886 and Christians 2,047, while there were a few Brahmos and Jains. The town is noted for its filigree work. The Grand Trunk Road passes through it, and the principal roads in the District converge on it; it is also served by the Mahānadi and is connected by canal with Chāndbāli and False Point.

Cuttack was constituted a municipality in 1876. The average income for the decade ending in 1901-02 was Rs. 48,000, and the expenditure was Rs. 42,000. In 1903-04 the income was Rs. 54,000, including Rs. 19,000 from a tax on persons (or property tax), Rs. 10,000 from a conservancy rate, and Rs. 9,000 from tolls. The incidence of taxation was annas 15-2 per head of the population. In the same year the expenditure was Rs. 52,000, the chief items being Rs. 21,000 spent on conservancy, and Rs. 8,000 on roads. In the cantonment a wing of a native infantry is stationed. The average receipts and expenditure of the cantonment fund in the 10 years ending in 1900-01 were Rs. 4,800 and Rs. 4,700 respectively. In 1903-04 the income was Rs. 11,500

and the expenditure Rs. 7,250. Cuttack is the head-quarters of a Superintending Engineer and three Executive Engineers. In addition to the usual public offices the chief public works are the stone embankments by which the town is protected from inundation, the Mahānadi railway bridge and the Mahānadi irrigation anicut. The District jail has accommodation for 409 prisoners, who are employed on oil-pressing, the preparation of coir fibre, carpet-making and weaving. The town contains several important educational institutions, the most notable being the Ravenshaw college. This is divided into a general department teaching from the F. A. to the M. A. standard, and a law department preparing students for the B. L. examination; it also possesses a high school teaching up to the entrance standard. There are also medical, survey and training schools maintained by Government, the Protestant European school and St. Joseph's Convent (Roman Catholic) for the education of Europeans and Eurasians, both of which receive grants-in-aid from Government, and 3 other high schools. The Cuttack General Hospital has beds for 60 male and 22 female patients.

False Point.—Cape, harbour and lighthouse in the Kendrapāra sub-division of Cuttack District, Bengal, situated in $20^{\circ} 20'$ N. and $86^{\circ} 47'$ E. on the north of the Mahānadi estuary. It takes its name from the circumstance that it was often mistaken by ships for Point Palmyras one degree further north. Ships have to anchor in a comparatively exposed roadway, and loading and unloading can only be carried on in moderately fair weather. A considerable export of rice, however, still takes place to Mauritius and Ceylon chiefly in sailing ships, valued in 1903-04 at 19.65 lakhs, while the export to the Madras Presidency amounted to over a lakh. The lighthouse stands in $20^{\circ} 19' 50''$ N. and $86^{\circ} 44' 20''$ E.

Jajpur Town.—Head-quarters of the sub-division of the same name, Cuttack District, Bengal, situated in $20^{\circ} 31'$ N. and $86^{\circ} 20'$ E. on the right bank of the Baitarani river. Population (1901) 12,111. Under the early kings of the Kesarī dynasty Jajpur was the capital of Orissa, and in the 16th century it was the scene of the struggle between the Musalmāns and Hindus, from which it emerged in ruins. It is still a resort for pilgrims, but has comparatively little trade. It contains many interesting buildings, among which the most striking are the temples of Birodā Devi, of the Boar incarnation of Vishnu, and the great sun pillar that stands a mile outside the town. This latter consists of a huge and beautifully proportioned column of stone raised on a solid pedestal, and if the temple was in proportion, it must have been of a remarkable size. All traces of it have, however, disappeared, and the column has only escaped owing to its great weight, which prevented its would-be destroyers from

moving it. Besides these, some ancient heroic figures of gods and goddesses are standing or lying in the compound of the sub-divisional office. They are considered to be very fine specimens of Hindu art, but all bear traces of Muhammadan vandalism in their mutilated features, from which the noses were cut by the renegade Kala Pahār. Interesting, too, are the grim features of the seven mothers of the earth in a dark little gallery by the river bank, but there is little beauty in any of these early works. The Muhammadan mosque built by Nawāb Abu Nasir in the 17th century is an elegant building and has lately been restored by the Public Works department. Jāipur was constituted a municipality in 1869. The average income for the decade ending in 1901-02 was Rs. 5,800 and the expenditure Rs. 5,300. In 1903-04 the income was Rs. 7,600 mainly from a tax on persons (or property tax), and the expenditure was Rs. 6,700. The town contains the usual public offices; the sub-jail has accommodation for 12 prisoners.

Kendrāpāra Town.—Head-quarters of the sub-division of the same name, Outtaok District, Bengal, situated in 20° 30' N. and 86° 25' E. Population (1901) 15,245. Its position on the Kendrāpāra canal in the heart of a rich grain-producing country gives it a considerable trade, and it is connected by road with Outtaok, Jāipur and Chāndbali. It was constituted a municipality in 1869. The average income and expenditure for the decade ending in 1901-02 were Rs. 8,000. In 1903-04 the income was Rs. 11,200, of which Rs. 6,700 was derived from a tax on persons (or property tax), and the expenditure was Rs. 11,100. Besides the usual public buildings, Kendrāpāra possesses a good school and dispensary, and a public library has lately been opened for the circulation of English and vernacular literature. The sub-jail has accommodation for 12 prisoners.

Mahāvinyaka.—Sacred peak of the Bārunibunta' hills in the Jāipur sub-division of Outtaok District, Bengal, situated in 20° 42' N. and 86° 6' E., and visible from Outtaok town. It has been consecrated during ages to Siva worship by ascetics and pilgrims who penetrated the surrounding jungles, braving the wild Savars and other forest tribes. The Vaishnavas, in later times, have built a monastery on the northern slope of the hill. A massive piece of rock, 12 feet in circumference, still bears the name of Mahāvinyaka, the great Ganesh or Vināyaka, from its resemblance to the elephant-headed god. The right face of the rock is considered to be his father Siva; the left face has a knot over it, fancied to represent the bound-up tresses of his mother, Gauri or Pārvatī. The rock is accordingly worshipped as the union of Siva, Gauri and Ganesh. A waterfall 30 feet higher up supplies the temple and its pilgrims. On the south side of the hill are the ruins of a fort known as "Teligarh";

the walls and inner rooms are of laterite and the door-ways of gneiss.

Naltigiri.—Spur of the Assia range in the head-quarters sub-division of Cuttack District, Bengal, situated in $20^{\circ} 35'$ N. and $86^{\circ} 15'$ E. on the south of the Birūpā river. The hill has two peaks of unequal height, with a pass between. It is famous for its Buddhist remains, some of which are in a fair state of preservation.

Palmyras Point.—Head-land in the Kendrāpāra sub-division of Cuttack District, Bengal, situated in $20^{\circ} 46'$ N. and $86^{\circ} 59'$ E., and constituting a landmark for vessels making for the Hooghly from the south.

Ratnāgiri Hill.—Small hill in the Jājpur sub-division of Cuttack District, Bengal, situated in $20^{\circ} 39'$ N. and $86^{\circ} 20'$ E. on the north bank of the river Keluo. On the top is a modern temple of Mahākāla, near the gate of which are five stone images 1 to $3\frac{1}{2}$ feet high, probably of Tantric origin. On the east several elaborately carved images have been dug up and erected. Further east is a colossal sculpture consisting of a male figure sitting on a lotus, below which are three rows of figures. Two enormous heads of Buddha, with thick lips and flat noses of the Dravidian type, have been dug out, and there can be little doubt that other images of great antiquarian interest are still lying buried. Local tradition ascribes these monuments to Vasakalpa Kesari, the king who is said to have built the monuments on Naltigiri hill.

Udayagiri (Sunrise hill).—One of the peaks of the Assia range in the Jājpur sub-division of Cuttack District, Bengal, situated in $20^{\circ} 39'$ N. and $86^{\circ} 15'$ E., so called from its being the most easterly of the hills in that District. The hill is in the form of an amphitheatre, and in the centre are some Buddhist remains. Here stood a temple of Buddha consisting of three parts, a sanctuary containing a colossal image of Buddha in a sitting and meditative posture, a porch now in ruins, and a brick wall encircling the temple with a gate facing the east. The image, which is now buried up to the breast, seems with the pedestal to be about 10 feet high. North of the temple are two well-carved images of Bodhisatwa, and further north two more images of Bodhisatwa have recently been found. To the west of the temple is a large well, and at the entrance to the amphitheatre is a large image of the two-handed Padmapāni Bodhisatwa cut out of a single gneiss slab standing on a pedestal, in all about 8 feet high.

Balasore District.—Northern District of the Orissa Division of Bengal, situated between $20^{\circ} 41'$ and $21^{\circ} 57'$ N. and $86^{\circ} 16'$ and $87^{\circ} 31'$ E. with an area of 2,085 square miles. The District

Bound-
aries, con-
figuration
and river
system.

* The area shown in the census report of 1901 was 2,059 square miles; that given above is taken from figures supplied by the Surveyor-General.

of Midnapore bounds it on the north-east; the wooded hills of the Tributary States of Mayūrbhanj, Nīlgiri and Keonjhar lie along the northern and western flank; and on the south the river Baitarani marks the boundary of Outtaok. The Bay of Bengal forms the eastern boundary.

Balasore District consists of a strip of alluvial land lying between the sea and the hills, which rise from the western boundary. This strip varies in breadth from about 30 miles at the north-east extremity to 10 miles at the narrowest or central portion and 40 miles in the south. Along the coast is a belt of land about 3 miles broad, which is impregnated with salt and unfit for cultivation. The western portion which runs along the foot of the hills is jungly and uncultivable. Between these two extremes lies the fertile arable country which constitutes the greater part of the District. It is watered, proceeding from north to south, by the river systems of the SUBARNAREKHĀ, Hāskurā, Sārathā, Pānchpāra, Burhābalang, Kānsbāns, Sālandī and BAITARANI. The Subarnarekhā which rises in Chotā Nāgpur pursues a winding course of some 60 miles in this District. It communicates with the coast canal at Jāmkundā lock and is largely used by country boats from Calcutta. The Hāskurā is a hill stream which rises in Mayūrbhanj; it contains very little water during the hot season, but during the rains it receives and carries away a great portion of the Subarnarekhā floods. The Sārathā runs a course parallel to the Hāskurā. The Pānchpāra is formed by the confluence of several hill streams from Mayūrbhanj, the principal being the Bāns, Jāmīra and Bhairīngi which unite, bifurcate and reunite in the wildest confusion. The tide runs up only 10 miles, and although the interlacings constantly spread into open swamps, yet one of them, the Bāns, is deep enough at certain parts of its course for boats of 4 tons burden. The Burhābalang, on which Balasore town is situated, runs a tortuous course of 35 miles; the name signifies "The old twister." The tide runs up 23 miles, and though sea-going steamers can no longer enter it, owing to the sand-bar across its mouth, it is navigable by brigs and sloops as far as Balasore town. The Kānsbāns, which is formed by the confluence of a number of small hill streams rising in the Tributary States, is liable to sudden freshets, and eventually reaches the sea by two mouths, the lower of which is called the Gamai, while the northern retains its original name. The Baitarani, which rises in Keonjhar State, forms the boundary between Balasore and Outtaok. After its junction with the Brāhmanī, the united stream flows under the name of the Dhāmra into the Bay of Bengal. The river is navigable as far as Olok, 15 miles from the mouth; beyond this point it is not affected by the tide and becomes fordable during the hot season. It receives two important tributaries on the Balasore bank,—the Sālandī and the Matai. A large

weir has been constructed across Baitarani at Akshayāpadā to dam the water during the dry season for the supply of the portion of the High-level canal between Akshayāpadā and Bhadrakh.

The Nilgiri hills consist of granitoid gneiss, interfoliated with which are occasionally found bands of a chloritic rock approaching serpentine in texture. This rock yields a beautiful, compact and very tough material, which is at the same time soft and easy to work. A few miles west and south-west of Jugjhuri the rocks alter considerably and assume a hard, tough, indistinctly crystallized hornblende character. Still further to the south-west and near the Sālandj river well foliated quartz schist comes in. Laterite in a compact form occurs along the base of the Nilgiri hills.* Geology.

Along the coast as far north as the Burhābalang river are large grassy plains with occasional sparse patches of cultivation and low Botany. jungle on the sand ridges and near the tidal streams. North of the Burhābalang and specially round the mouth of the Hāskurā and Subarnarekhā are numerous tidal creeks fringed with heavy jungle. The cultivated land has the usual rice-field weeds, while ponds and ditches are filled with floating water weeds or submerged water plants. Near human habitations shrubberies of semi-spontaneous shrubs are common, and are loaded with a tangled mass of climbing *Convolvulacea*. The arborescent portion of these village shrubberies includes the red cotton tree (*Bombax malabaricum*), jiyal (*Odina acodier*), *Tamarindus indica*, *Moringa*, *Pterygosperma*, pipal (*Ficus religiosa*), banyan (*Ficus bengalensis*), *Borassus flabellifer* and khajūr (*Phanix sylvestris*). There are no forests, but in the west of the District, where the boundary approaches the hills and the lands are higher, patches of jungle occur, including a little *sāl* (*Shorea robusta*), which rarely attains to any size. The usual bamboo is *Bambusa arundinacea*. Open glades are filled with grasses, sometimes of a reedy character. Sedges are abundant, and ferns are fairly plentiful.

Black bear are found in the north, and tigers, leopards, Fauna. hyenas, spotted deer, antelope, hog deer, mouse deer, civet cat and hares are common in the more jungly portions of the District.

The District is directly on the track of the cyclonic storms which cross Orissa frequently during the monsoon season, and the extremes of climate are more marked than in most parts of Bengal. In April and May the average maximum temperature is 98°. The mean temperature falls from 89° in the hot season months to 83° in the monsoon season and to 74° in February. Climate and temperature.

* Memoirs of the Geological Survey of India, vol. 1, part III. The Geological Structure and Physical Features of the Districts of Bānkurā, Midnapore and Orissa.

Dry westerly winds often blow during the hot season, and these are followed by well marked south-west monsoon conditions; the humidity thus ranges from 79 per cent. in April and May to 89 per cent. in August. The average annual rainfall is 60 inches, of which 5·1 inches fall in May, 9·0 in June, 121 in July, 11·5 in August, 11·2 in September and 5·1 in October.

Natural
calamities.

The District is subject to floods due to the sudden rising of the rivers in the hills. Protective embankments have been built, the principal being the Bhograi and Salsā Pat on the lower reaches of the Subarnarekhā, but the protection afforded by them is far from complete. An exceptionally high flood occurred in 1868, while there were floods of inferior height but more serious in results in 1892 and 1896, the latter causing a great loss of crops in the south of the District. Other years of high floods were 1855, 1866, 1872, 1883, 1886, 1888, 1894, 1897 and 1898. In October 1900 the water rose 18 inches higher than in any flood previously recorded and breached the railway line and destroyed crops and cattle, though it caused very little loss of human life. The cyclones to which Balasore is exposed are generally accompanied by irresistible storm-waves, which vary in height from 3 to 10 feet and sometimes penetrate as far as 10 miles inland. Such calamities occurred in 1823, 1831, 1832, 1848 and 1851. In the severest of these, the cyclone of 1831, 26,000 persons lost their lives. Cyclones have also occurred in 1872, 1874 and 1891, but these were not accompanied by storm-waves.

History.

The early history of Balasore presents no special features of interest beyond such as are given in the article on ORISSA. The settlement of the British in the District dates from 1623, when a factory was established in BALASORE TOWN. This was at once fortified and became the key to the position which England has since gained in India. The remainder of the District did not pass into the hands of the English till the acquisition of Orissa in 1803. It was created a separate District in 1828. There have been many changes of jurisdiction, but it is unnecessary to detail them here.

The
people.

The population of the present area increased from 770,232 in 1872 to 945,280 in 1881, to 994,675 in 1891, and to 1,071,197 in 1901. The great increase between 1872 and 1881 was due partly to improved enumeration and partly to a recovery from the losses caused by the famine of 1866. The District often suffers from severe epidemics of cholera. The worst outbreak took place in 1892, when this disease was responsible for a mortality of 15 per mille. Elephantiasis is extremely common. Fever prevails in the cold weather, but the country is singularly free from malaria, except in the Jaleswar thāna, which is very unhealthy.

The salient statistics of the census of 1901 are reproduced below:—

SUB-DIVISION.	Area in square miles.	NUMBER OF		Population	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Balasore	1,153	1	2,115	892,544	513	+5.3	3,512
Bhadrakh	950	1	1,246	474,031	515	+6.9	37,974
DISTRICT TOTAL	2,095	2	3,353	1,071,197	514	+7.7	83,486

The towns are BALASORE, the District head-quarters, and BHADRAKH. The density of population is greatest in the Bhadrakh thana, where it rises to 662 persons to the square mile. The largest increase in the decade ending in 1901 took place in the Chāndbali and Bāsudebpur thanas in the south-east of the District, both of which contain much land fit for cultivation. The District sends numerous emigrants to the 24 Parganas and to Calcutta, where many of them are employed as domestic servants and cooks, but otherwise there is little migration except to and from the neighbouring Districts and States. The vernacular is Oriya. Of the population 1,033,166 (96.4 per cent.) are Hindus, 28,340 (2.6 per cent.) Musalmāns and 0.8 per cent. Animists.

The most numerous castes are the Khandails (211,000) originally the feudal militia maintained by the Rājās of Orissa, Brāhmins (120,000), Gauras (74,000) and Rājās (47,000); Gokhās (31,000) and Golās (31,000) are more numerous in this District than elsewhere, while other distinctive Orissa castes are Kāndras, usually day labourers and *chaukidars* (32,000), and Karnas, the writer caste (26,000). Agriculture supports 79 per cent. of the population, industries 9.6 per cent., commerce 0.3 per cent. and the professions 1.1 per cent.

Christians number 1,274, of whom 1,110 are natives. Two Christian missions are at work, a Roman Catholic and an American Free Baptist Mission. The latter, which has been in the District since 1832, has 6 stations. It maintains in Balasore a high school, an English school for European boys and girls, 5 Kindergarten lower primary schools and a middle English school, and at other stations 2 middle English, 1 vernacular school as well as 31 lower primary schools and 1 Kindergarten school. Industrial work is taught including farming, weaving and carpentry. The mission also possesses 3 orphanages and carries on medical work on a large scale. The Roman Catholic mission is a comparatively small one;

it works chiefly in the town of Balasore, where it possesses a large chapel and an orphanage for native girls.

General
agricul-
tural
conditions.

The alluvial tract which extends through the centre of the District is fertile. The higher land on the west is for the most part rocky, but in some places where vegetable deposits occur it is very productive. Along the coast, except in years of excessive rainfall, the soil is generally infertile on account of the deposits of salt. Lands are ordinarily divided into three classes, *jālā* or rice lands, *pāl* or rich riverside lands growing tobacco, cotton, *rabi* crops and the best rice, and *kālā* the high lands of the homestead, which generally grow vegetables.

Chief
agricul-
tural sta-
tistics and
principal
crops.

The salient agricultural statistics for 1903-04 are reproduced below, areas being in square miles:—

SUB-DIVISION.		Total.	Cultivated.	Culturable waste.	Irrigated.
Balasore	...	1,155	785	121	...
Bhadrakh	...	930	601	98	63
TOTAL		2,085	1,386	219	63

Of the cultivated area only 1 per cent. is estimated to be twice cropped. Rice is the principal food-grain and includes three crops, *sārad* or winter rice, *biāh* or autumn rice and *dālua* or spring rice. Of these winter rice is estimated to cover 1,025 square miles or 77 per cent. of the whole area under cultivation. On the higher levels the crop is sown broadcast, but in low lands the seedlings are transplanted. The sowing takes place in May or June, but the reaping seasons vary for different varieties, *āsu* being reaped in August or September, *kandā* in September or October and *guru* from November to January. *Biāh* rice, which is sown in May and reaped in August and September, covers 163 square miles, while the area under *dālua*, sown in November and December and reaped in March, is ordinarily very small. The other crops are of minor importance, pulses covering only 17 and oilseeds only 16 square miles.

Improve-
ments in
agricul-
tural
practice.

Cultivation has extended by 40 per cent. during the last 70 years, but owing to the innate conservatism of the Oriya little improvement is visible in the methods adopted. Various experiments have been made at the instance of Government with new crops and modern implements, but these have not found favour with the ryots. Little advantage has been taken of the Land Improvement Loans Act, but useful work has been done under the Agriculturists' Loans Act, particularly in times of distress following floods.

The cattle are similar to those common to South Bengal. Cattle. Fodder is scarce in the centre of the District, but extensive pasture lands along the coast and the higher land in the west afford good grazing.

The only irrigation system is that provided by the High-Irrigation. level canal, which has within the District a length of 19 miles in addition to 50 miles of distributaries. It commands 90 square miles, of which 69 square miles are actually provided with means for irrigation. The area irrigated in 1903-04 was 62 square miles. In addition to this, water from the rivers is utilized in order to irrigate the crops near their banks.

Laterite is found along the west of the District, and is used Minerals. for building; the honey-combed variety was largely used in former times for temples. Chlorite is also obtained from the hills in the western border and is the material from which all ancient statues and idols were carved; at the present time it is used for the manufacture of plates and bowls.

Cotton weaving and mat making are carried on, and brass and Manufactures. bell-metal articles are manufactured.

The chief imports are European cotton piece-goods, oil, salt Commerce. and spices; the principal export is rice, which in favourable seasons is despatched in enormous quantities by sea, canal and rail. Other exports are hides, jute, oilseeds, timber and stone-ware. Rice is shipped to Ceylon and Mauritius, but otherwise trade is carried on chiefly with Calcutta and Madras. Balasore and Chāndbali are the chief centres of the sea-borne trade, other places of trade being Māndhātā on the coast canal, Bāliapāl on the Matai river, and Bāmbātia on the Guclidā river, a tributary of the Subarnarekhā. A great deal of the rice exported was formerly carried by native coasting vessels, but the silting up of several of the smaller ports and the opening of the coast canal and the railway have recently caused a great decline in the volume of this trade. The imports which passed through the ports of Chāndbali and Balasore in 1903-04 were valued at 28.9 lakhs and the exports at 25.7 lakhs, but these figures include a large amount of trade from the Cuttack District.

The Bengal-Nāgpur Railway runs for 88 miles through the District and connects it with Calcutta, Cuttack and Madras. A Railways and roads. branch line, called the Mayūrbhanj State Railway, from Rupsā junction to Baripāda in Mayūrbhanj State was opened in 1901. A survey for a branch from Balasore to Chandipur on the coast is being made, and a light tramway from Balasore to tap the Nilgiri stone quarries is contemplated. The Grand Trunk Road affords communication with Midnapore and Calcutta on the north and with Cuttack, Puri and Ganjam on the south. Apart from this road (95 miles), which is metalled and maintained from Provincial funds, 41 miles of metalled, 208 miles of unmetalled roads

and 106 miles of village tracks are maintained by the District board; the most important are those from Bhadrakh to Chāndbāli, from Balasore to Mitrapur in Nilgiri, from Kamardā to Bāliāpāl, from Bāliāpāl to Bastā, from Kamardā to Jaleswar and from Singlā to Nangaleswar.

Water
communi-
cations.

The rivers have already been described. For navigation purposes the most important are the Subarnarekhā, the Burhābalang, on which Balasore is situated, the Dhāmra and the Baitarani, which connect Chāndbāli with the sea, and the Sālandī, on which Bhadrakh lies. The Coast Canal, which connects the Hooghly at Geonkhālī with the Matai at Ohāribātīn, has a range of 71 miles within the District; it was completed in 1887, but has not been a financial success. The High-level canal has a course of 19 miles within this District; it is navigable, but has been little used for traffic since the opening of the railway. The Public Works department also maintains 46½ miles of protective embankments. A canal connecting the old port of Churāman with the Matai river has fallen into disrepair. A bi-weekly steamer service runs between Chāndbāli and Calcutta. The District contains 18 ferries under the control of the District board, the most important being those where the Grand Trunk Road crosses the Subarnarekhā and the Burhābalang rivers.

Famine.

The District suffered grievously in the great Orissa famine of 1865-66. The rainfall of 1865 was scanty and ceased entirely after the middle of September, so that the outturn of the winter rice crop on which the country depends was only one-third of the average crop. Stocks were moreover dangerously depleted, as unusually large quantities of grain had been exported. By November distress had begun to be acute, and in February 1866 starvation appeared and relief operations were commenced; but the works were to a great extent rendered inoperative for want of rice to feed the labourers. By the month of April even the well-to-do peasants had only a single scanty meal a day, while the poorer classes eked out their subsistence with roots, herbs, and leaves. Government succeeded in importing about 12,000 maunds of rice by the end of July, but the monsoon had begun and importation on any large scale was impossible. Orissa was at that time almost isolated from the rest of India. The mortality reached its culminating point in August, when heavy rains caused great suffering among the people, who were then at the lowest stage of exhaustion, emaciated by hunger and without sufficient shelter. Disastrous floods in the south-east of the District followed these rains; 83,000 acres were inundated; and in all the low-lying lands the crop was lost. The harvest in the higher lands was, however, a good one; the new crop came into the market in September; and though the rate of mortality continued high for some time owing to cholera, the famine came to a

November. During the year the price of rice rose as high as 2½ seers to the rupee, and in the town of Balasore alone 10,000 paupers succumbed to starvation and disease. The total mortality was estimated at 217,608, 31,424 deaths being ascribed to diseases resulting from starvation; 29,558 persons emigrated; and the total loss was, therefore, 247,167, or one-third of the population. The daily average of persons relieved from June to November 1866 amounted to 26,497; out of this number, 21,945 received gratuitous relief and 4,552 were employed on light work. The total expenditure on relief works from May to November 1866 amounted to Rs. 73,356. In 1896 the outturn of rice was estimated at barely half of a normal crop, but though there was considerable local distress, very little relief was found necessary beyond such as was afforded by the facilities for obtaining earthwork on the railway.

For general administrative purposes the District is divided into two sub-divisions with head-quarters at BALASORE and BHADRAKH. The District Magistrate-Collector is assisted at Balasore by three Deputy Magistrate-Collectors. The sub-divisional officer of Bhadrakh, who is often a member of the Indian Civil Service, has a sub-deputy collector subordinate to him. The Executive Engineer of the Balasore Division is stationed at Balasore, and the Port Officer of the Cuttack and Balasore ports at Chandbali. District sub-divisions and staff.

For the disposal of civil work, two Munsifs sit at Balasore and Bhadrakh subordinate to the District and Sessions Judge, who is also Judge of Cuttack and Puri. The criminal courts include those of the District and Sessions Judge, the District Magistrate, 3 Deputy Magistrates, the sub-divisional officer of Bhadrakh, the sub-deputy collector of Bhadrakh, and the Port Officer of Balasore port. The District Magistrate is *ex-officio* Assistant to the Superintendent of the Orissa Tributary Mahals and has the powers of a Sessions Judge in Nilgiri, Mayurbhanj and Keonjhar. The District is singularly free from serious crime, and the majority of cases are of a petty character. Civil and criminal justice.

The early Hindu rulers of Orissa recognized no middlemen between them and their subjects, but the residents of each village paid their quota through a headman (*padhan*). The villages were grouped into large divisions (*khand* or *tisi*) of 10 to 50 square miles, the prototypes of the later Muhammadan *parganas*; over each division was an executive officer (*khandpatis*) who acted as the representative of the sovereign, and with the assistance of the divisional accountant (*bhaimbi* or *bishayi*) collected the revenue and handed it over to the head of the District (*desadhipati*). The first regular settlement was begun in 1680 by Akbar's chief finance minister Todar Mal. In the central and most richly cultivated part of Balasore he made a detailed settlement, land revenue.

fixing the rates of rent in every village. He confirmed in possession the hereditary under-officials, the *khandpatis* and *bhoimāts* becoming *chaudhris* and *kāungos* and being entrusted with the collection of revenue and the other rights and liabilities of zamindārs for the area under their direct management. The village headmen he maintained under the appellation of *mukaddam*; where there were no hereditary headmen or where the *padhān* had been dispossessed, collections were often made through an agent (*kari*) or farmer (*sarbarāhkār* or *mistājir*) appointed by the *tahuldār*, and many of these developed into hereditary tenureholders with rights almost equal to those of *mukaddams*. The Marāthās made no change in the character of the fiscal organization, and the above mentioned tenures represent the most important of those found by the British Commissioners in 1803. A settlement made in 1834-45 should have expired in 1867 but was extended till 1897, when a new settlement was introduced for a term of 30 years, which will expire in 1927. The revenue demand was raised from 3.85 to 6.28 lakhs. In 1903-04 the total current demand was 6.50 lakhs, of which 5.82 lakhs was payable by 1,463 temporarily settled estates, Rs. 42,000 by 152 permanently settled estates and Rs. 26,000 by 14 estates held direct by Government. The total incidence of land revenue was 11½ annas per cultivated acre. At the recent settlement the average area held by each ryot was found to be 5.48 acres, and the rates of rent ranged between Rs. 3-8-3 and R. 0-11-5 per acre, the average being R. 1-12-11 per acre.

The following table shows the collections of land revenue and of total revenue, under the principal heads, in thousands of rupees:—

		1880-81.	1890-91.	1900-01.	1903-04.
Land revenue	...	4.11	4.21	6.25	6.53
Total revenue	...	6.69	7.63	10.98	11.21

Local and
municipal
govern-
ment.

Outside the municipality of Balasore, local affairs are managed by the District board to which sub-divisional local boards are subordinate. In 1903-04 its income was Rs. 1,05,000, of which Rs. 36,000 was obtained from rates, and the expenditure was Rs. 96,000, including Rs. 43,000 spent on civil works and Rs. 32,000 on education.

Police
and jails.

The District contains (1903) 9 police stations and 13 outposts, and the force subordinate to the District Superintendent of Police consists of 2 inspectors, 28 sub-inspectors, 25 head-constables and 331 constables; in addition, there is a rural police force of 140 *daffādars* and 1,538 *chaukidars*. The District jail at Balasore

has accommodation for 163 prisoners, and a subsidiary jail at Bhadrakh for 14.

Of the population in 1901, 7·8 per cent. (15·7 males and 0·4 females) could read and write. The number of pupils under instruction increased from 22,737 in 1880-81 to 37,140 in 1892-93, but the number fell to 35,375 in 1900-01. In 1903-04, 30,034 boys and 4,447 girls were at school, being respectively 38·6 and 5·8 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year, was 1,671, including 34 secondary schools, 1,635 primary schools and 102 special schools. The expenditure on education was Rs. 1,47,000, of which Rs. 17,000 was met from Provincial revenues, Rs. 31,000 from District funds, Rs. 1,300 from municipal funds and Rs. 71,000 from fees. The chief schools are the Government and Baptist Mission high schools at Balasore; other special institutions are an industrial school at Alālpur, a *madrasa* at Dhamnagar and 8 schools for depressed tribes and castes.

In 1903 the District contained 11 dispensaries, of which 3 had accommodation for 71 in-door patients; the cases of 43,000 out-patients and 600 in-patients were treated and 1,700 operations were performed. The expenditure was Rs. 16,000, of which Rs. 600 was met by Government contributions, Rs. 6,000 from local and Rs. 1,200 from municipal funds, and Rs. 3,000 from subscriptions.

The mortality from small-pox is comparatively high. Vaccination is compulsory only in Balasore municipality, but the population is not averse to vaccination, and in 1903-04, 24,000 persons or 23·2 per thousand of the population were successfully vaccinated.

[Sir W. W. Hunter, *Orissa*, 1872, and *Statistical Account of Bengal*, vol. xviii, 1877; S. L. Maddox, *Final Report on the Survey and Settlement of Orissa*, Calcutta, 1900.]

Balasore Sub-division.—Head-quarters sub-division of the Balasore District, Bengal, lying between 21° 4' and 21° 57' N., and 86° 21' and 87° 29' E., with an area of 1,155 square miles. The sub-division consists of a narrow strip of alluvial soil shut in by the Bay of Bengal on the east and by the hilly country of the Garjāts on the west. Its population was 592,544 in 1901, compared with 546,893 in 1891, the density being 513 persons to the square mile. It contains one town BALASORE, its head-quarters (population 20,880), and 2,112 villages. After Balasore, BALIAPAL is the chief centre of trade. A large annual fair is held at REMUNA.

Bhadrakh Sub-division.—Southern sub-division of the Balasore District, Bengal, lying between 20° 44' and 21° 15' N. and 86° 16' and 86° 58' E. with an area of 980 square miles. The sub-division is a fertile deltaic tract watered by numerous

streams which flow from the Chotā Nāgpur plateau into the Bay of Bengal. Its population was 478,653 in 1901, compared with 447,782 in 1891, the density being 515 persons to the square mile. It contains one town BHADRAKH, its head-quarters (population 18,518), and 1,246 villages. A large trade passes through CHANDRALI port in the south of the sub-division.

Balasore Town.—Head-quarters of the District of the same name, Bengal, situated in $21^{\circ} 30' N.$ and $86^{\circ} 56' E.$ on the right bank of the Burhābalang river about 15 miles from its mouth, though only 6 miles in a direct line from the sea. Population (1901) 20,880, of whom 16,671 were Hindus, 3,688 Muhammadans and 510 Christians. The name is probably derived from the temple of Mahādeo Bāneswar which is still standing, and was so called after Bānasura, its traditional founder. The town first rose to importance in the 17th century. An English factory was established at Balasore in 1633 in response to an invitation from the governor Mir Kāsim. The place was shortly afterwards granted to the East India Company at the request of Mr. Boughton, who had successfully treated one of the ladies of the Viceroy's *zanāna*. It was at once fortified and so became the key to the position which England has since gained in India. During the long struggle between the Afghāns and the Mughals and subsequently between the Mughals and Marāthās, for supremacy in Orissa, the English steadily kept the footing they had obtained. Defended on one side by the river and on all others by a precipitous channel, which had been deepened so as to form a moat, and which remains to this day, and further protected by the guns on its ramparts and the armed merchantmen in the roads, Balasore was safe from attack and soon became known as the only quiet retreat in the District for peaceful people. Industry and commerce gathered round it, and manufacturing hamlets and colonies of weavers nestled beneath the shadow of its walls. In 1685 the English were forced into open warfare, and in 1688 Captain Heath of the "Resolution," the commander of the Company's forces, who had in vain negotiated for a fortified factory on the present site of Calcutta, sailed with Job Charnock down the Hooghly and entered Balasore river. Here they found the Mughal governor strongly fortified on a projecting promontory commanding the river. The fort was taken with small loss in a single night, and on the following day the English after a short struggle made themselves masters of the town. But as early as 1700 the mouths of the Burhābalang had commenced to silt up, and the passage of the bar gradually became more difficult. The town lost a great deal of its importance when Government abandoned the monopoly of the salt manufacture and trade in 1863; but the port still possesses a large trade, and is in charge of the Port Officer at Chāndbāli. The principal exports

are paddy and stoneware quarried chiefly in the Nilgiri Hills, and the chief imports cotton twist, European cotton piece-goods, kerosene oil and salt.

The French, Dutch and Danes also possessed settlements at Balasore. The two latter, known as *Ulanshāhi* (Hollandais-shāhi) and *Denamārdānga*, were ceded to the British in 1846. The French settlement known as *Farāsdānga* was never ceded; it is subject to the authority of the Administrator at Chandernagore. The lease of the territory, which is only 38 acres in area, is disposed of annually by auction.

Balasore was constituted a municipality in 1877. Though it includes an extensive bazar, the town is in reality little more than a collection of hamlets, the area within municipal limits being 5 square miles. The average income for the decade ending in 1901-02 was Rs. 18,000 and the expenditure Rs. 17,000. In 1903-04 the income was Rs. 18,000, of which Rs. 8,000 was derived from a tax on persons (or property tax), and the expenditure was Rs. 16,000. The chief buildings are the usual public offices, the District jail, the general hospital and a charitable dispensary, while the railway bridge over the *Burbābalang* is an imposing structure. The jail has accommodation for 168 prisoners, who are employed on oil-pressing, weaving of coarse cloths and carpets, and cane and bamboo work. The chief educational institutions are the Government high school and a high school maintained by the American Free Baptist Mission.

Bālīāpāl.—Village in the head-quarters sub-division of Balasore District, Bengal, situated in $21^{\circ} 39' N.$ and $87^{\circ} 17' E.$ on the *Matai* river. Population (1901) 298. Rice to the annual value of a lakh of rupees is exported in sloops to Calcutta, Madras and the Laccadives.

Bhadrakh Town.—Head-quarters town of the sub-division of the same name, Balasore District, Bengal, situated in $21^{\circ} 3' N.$ and $86^{\circ} 31' E.$ on the banks of the *Salandī* at the 43rd mile of the Trunk Road below Balasore. Population (1901) 18,518. The town derived its name from the goddess *Bhadrakālī* whose temple stands near the river. It consists of a group of hamlets covering about 3 square miles, and is divided into two quarters, the *Nayābazar* on the right bank of the *Salandī* and the *Purānabazar* on the left, the latter being the chief centre of trade. The principal articles of commerce are rice, salt, kerosene oil, cotton, cattle and hides. The town contains the usual sub-divisional offices; the sub-jail has accommodation for 14 prisoners.

Chāndbālī.—Port in the Bhadrakh sub-division of Balasore District, Bengal, situated in $20^{\circ} 47' N.$ and $86^{\circ} 45' E.$ on the left bank of the *Baitarani* river, 8 miles west of its confluence with the *Brahmanī*, and 20 miles from its mouth. Population (1901) 1,826.

It is connected with the interior by the Matai, the Bhadrakh road and various tidal creeks. The importance of the port has decreased owing to the opening of the Bengal-Nagpur Railway, but it still possesses a large trade, and is supervised by a Port Officer. The sole export of importance is rice; the chief imports are cotton twist, piece-goods, kerosene oil, salt, spices and gunny bags.

Chandipur.—Village in the head-quarters sub-division of Balasore District, Bengal, situated in $21^{\circ} 27' N.$ and $87^{\circ} 2' E.$ on the sea coast, about 9 miles east of Balasore town, and near the mouth of the Burhabalang river. Population (1901) 627. The Ordnance Proof department has a sea-range where cannon are tested. The department has also a magazine and all necessary instruments at Chandipur. Since the railway has brought Balasore within easy reach of Calcutta, there has been an influx of visitors who come to enjoy the sea breezes at Chandipur, and the place possesses possibilities as a health resort; there is a long level beach and sea bathing is possible owing to the absence of surf. A branch line of the Bengal-Nagpur Railway to connect Chandipur with Balasore has been projected. Large quantities of excellent fish are caught here, which are carried by coolies to Balasore and thence sailed to Calcutta.

Jaleswar.—Village in the head-quarters sub-division of Balasore District, Bengal, situated in $21^{\circ} 49' N.$ and $87^{\circ} 18' E.$ on the left bank of the Subarnarekhā, 12 miles from its mouth. It lies on the Calcutta high road and is also a station (Jollasore) on the Bengal-Nagpur Railway. It was formerly the capital of a Muhammadan *sarkār* comprising the present District of Midnapore. During the 18th century the East India Company had a factory here.

Remuna.—Village in the head-quarters sub-division of the Balasore District, Bengal, situated in $21^{\circ} 33' N.$ and $86^{\circ} 53' E.$ about 5 miles west of Balasore town. Population (1901) 1,430. It is celebrated for the temple of the god Kshīrchorā Gopināth, a form of Krishna, in honour of whom a religious fair is held annually in February. The fair lasts for 13 days and is attended by a very large number of pilgrims. Toys, sweetmeats, fruits, vegetables, country cloth and other articles are sold at the fair. The temple of the god is an unsightly stone edifice disfigured by indecent sculptures.

Boundaries, configuration, and hill and river systems.

Angul District.—District lying among the Tributary States in the south-west of the Orissa Division, Bengal, between $20^{\circ} 13'$ and $21^{\circ} 10' N.$, and $83^{\circ} 50'$ and $85^{\circ} 43' E.$, with an area of 1,681 square miles. The District comprises two detached sub-divisions, known as Angul and the Khondmāla, with different physical and ethnographical characteristics. The former, or head-quarters sub-division, is bounded on the north by Rairākhōl and Bāmra

States; on the east by Tāleher, Dhenkānāl and Hindol; on the south by Daspallā and Narsinghpur; and on the west by Athmallik State. The Khondmāls or Kandhmāls, the hills inhabited by the Khond or Kandh tribe, lie to the south-west of Angul, and form an *enclave* of the Baud Tributary State, which bounds them on the north, east and west; on the south the boundary marches with the Ganjām District of Madras.

The Angul sub-division has the general characteristics of this part of Orissa, low wooded hills enclosing cultivated valleys intersected by numerous water-courses which run dry in the summer. The south is hilly, forming an outlying chain of the Sātpura Range; the line of hills runs from south-west to north-east and is the water-shed between the river Mahānadi on the south and the Brāhmanī on the north. The scenery in the hills is picturesque, the Mahānadi threading its way between precipitous hills clothed in dense forest before it debouches on the plains below.

The Khondmāls form a broken plateau, about 1,700 feet in height, intersected by circular ranges of hills. Heavy forest still covers much of this tract, and the cultivated lands lie in scattered clearings on the hillsides and in the valleys below. A range of hills, 3,000 to 3,300 feet in height, separates the Khondmāls from Ganjām and forms the southern limit of the watershed of the Mahānadi.

The MAHANADI rises in the Central Provinces and forms the boundary between Angul on the north, and the Baud and Daspallā Tributary States on the south. On its left bank it receives the drainage of south Angul, the principal tributary being the Barajorā, and on its right bank the Tel, Mārini and Jormu in Baud, and the Bāghnadi, Sālki and the Hirāmānanda which drain the Khondmāls. Some 40 miles further north and parallel to the Mahānadi flows the BRAHMANI, which passes just outside the northern boundary of Angul and receives most of its drainage by the Tikrā, Nandir Jhor and Nigrā tributaries.

The District is formed partly of gneissic rocks, and partly of Geology. sand-stones, conglomerates, and shales referable to the Gondwāna system.*

Extensive forests clothe the hills and valleys; the *sāl* (*Shorea* Botany. *robusta*) is the principal constituent, and bamboos are plentiful. Other trees are *Anogeissus latifolia*, *Lagerstræmia parviflora*, *Albizzia*, *Adina cordifolia*, *Ougonia dalbergioides*, *Sterculia urens*, *Phyllanthus*, *Diospyros*, *Pterocarpus marsupium* and *Dalbergia latifolia*.

These forests harbour wild animals of all kinds. There are Fauna. wild elephants and bison in their deeper recesses; tigers, leopards,

* Memoirs of the Geological Survey of India, vol. i.

deer, pig and wild dogs in the lighter jungle, and bears on all the hills. The yearly loss in human lives and cattle and the damage to crops from the depredations of wild animals are enormous.

Climate. The climate is unhealthy, especially in the Khondmāls, where malaria is notoriously prevalent, and the sudden changes of temperature are very trying. The rainfall is uncertain and unevenly distributed. The normal fall for the District is 53 inches, of which 9·8 inches fall in June, 12·2 in July, 10·5 in August, 9·6 in September and 4·3 in October.

History. Angul in common with the rest of the Hill Tracts of Orissa was at one time inhabited by aboriginal Khonds, who at an early date were driven back into the rocky fastnesses of the Khondmāls by successive waves of Hindu immigrants. Many centuries ago the numerous loosely formed States and principalities of the Hill Tracts of Orissa fell into the hands of Rājput adventurers, who had probably come to make the pilgrimage to Purī, and who found the country an easy prey. The earlier rulers were often at feud with one another, and it was easy to provoke a quarrel here, or stir up an intrigue there, and then take advantage of the dissension to seize the chief's fortress, the possession of which in those days meant the government of the State. There is no record of these different conquests, but gradually all the Hill States of Orissa, Angul among the number, came under rulers who were or claimed to be Rājputs. Angul had the same history as its neighbours, at one time warring successfully and gaining a few villages, at another time warring unsuccessfully and losing a few; and while in the Orissa delta in these early times a great civilization waxed and waned, the Hill Tracts remained practically barbarous and untouched by outside influences. The old chiefs all acknowledged allegiance to the Purī Rājā, and, when the East India Company took over the territories, the hill Rājās received *sanads* and agreed to pay tribute, Angul's annual contribution being fixed at Rs. 1,650. In 1846 the Rājā was one Somnāth Singh, who early acquired an evil reputation as an oppressor among his own people and a filibuster among his neighbours. The friction between him and the Government originated in the Khondmāls, where he assisted rebellions of the Khonds in 1846 and 1847. In the latter year, moreover, a body of *parks* from Angul crossed the Mahānadi and destroyed two villages belonging to the Rājā of Daspallā. The Rājā of Angul was summoned to Cuttack to explain his conduct, but he refused to come, and in December 1847 Government issued a proclamation annexing Angul, and a force of three regiments of infantry, a battery of artillery, and a squadron of irregular cavalry invaded the country from Ganjām, in co-operation with a smaller force from the Central Provinces. The country was occupied practically without a blow, and the Rājā was imprisoned for life

at Hazāribāgh. Angul was administered by a *tahsildar* (or revenue collector) under the Superintendent of the Orissa Tributary Mahals until 1801, when it was made a separate District, the Khondmāls being added to it.

The Khondmāls was originally a part of Baud Tributary State, but the Khonds were practically independent, and the Rājā was quite unable to manage them. Matters came to a climax when Government determined to put down human sacrifice among the Khonds; the Rājā confessed himself unable to put down these sacrifices and (in 1835) made over the tract occupied by them. It was at first administered by the Madras Government, which had created a special Agency for the purpose of suppressing human sacrifice among the Khonds across the Ganjam border. The Baud Khonds gave considerable trouble before their sacrifices were finally suppressed, and a formidable rising took place in 1847. They finally settled down, however, and in 1855 the administration of their country was transferred to Cuttack. A *tahsildar* held charge of the tract until 1891, when it was formed into a sub-division of the Angul District.

The population of Angul, including the Khondmāls, increased from 130,181 in 1872 to 160,861 in 1881, to 170,058 in 1891 and to 191,911 in 1901.

The chief statistics of the census of 1901 are reproduced below:—

SUB-DIVISION.	Area in sq. m.	SEXES OF		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		TOTAL.	MALES.				
Angul	141	—	63	127,077	144	+13.1	3,379
Khondmāls	40	—	12	11,514	28	+2.2	201
DISTRICT TOTAL	181	—	75	138,591	174	+11.3	3,580

Only one of the villages, Angul, the head-quarters, has more than 2,000 inhabitants. The decrease in the Khondmāls in the decade ending in 1901 was due to the prevalence of cholera and other diseases, and to short crops in 1896 and 1899, which stimulated emigration. Angul attracts numerous settlers from the neighbouring States. Oriyā is spoken by 77 per cent. and Khond or Kui by 22 per cent. of the population; the latter is a Dravidian language allied to Telugu, and is the tribal dialect of the Khonds, most of whom still speak it. Animists, nearly all of whom are Khonds, number 42,710 or 22 per cent. of the whole population; the remainder are nearly all Hindus (148,799). Christians number only 33, of whom 24 are natives.

Their
castes and
occupa-
tions.

The Khonds (48,000) are the most numerous caste, and they survive in the Khondmāls as a distinct nationality, with a history, a religion, a language and a system of law and landed property of their own. They first came into prominence in the early part of the 19th century owing to the human sacrifices enjoined by their religion as a propitiatory offering to the Earth Goddess, the flesh of the victims being buried in the fields to ensure good crops. The victims or *meriahs*, as they were called, were purchased, and the duty of providing them rested with a semi-aboriginal tribe called Pāns, who are attached to every Khond village. These human sacrifices were suppressed with difficulty by the British Government, as described in the paragraph on history. The Chāsas (41,000) are the great cultivating caste of Orissa, and are largely of non-Aryan descent. The Gaurs (13,000) are cattle-herds. The Pāns (20,000) are weavers and notorious thieves. Agriculture supports 76 per cent., industry 15 per cent. and commerce one per cent. of the population.

General
agricul-
tural con-
ditions.

Angul is a fairly open country and well-watered, but the Khondmāls is a high mountainous plateau and contains little level land. The Khonds largely follow the nomadic system of *gham* cultivation, cutting and burning the forest in the dry season and dibbling in their seeds when the rains break. At first such lands are abandoned after a year or two, but as the population increases this practice is modified and the slopes are more regularly tilled, until eventually they are ploughed year after year without intermission.

Chief
agricul-
tural sta-
tistics and
principal
crops.

The salient agricultural statistics for 1903-04 are reproduced below, areas being in square miles :—

SUB-DIVISION.	Total.	Cultivated.	Culturable waste	Forests.
Angul ..	881	251	21	629
Khondmāls ...	800	197	80	500
Total ...	1,681	448	101	1,129

The principal crop is rice, which covers nearly half the cultivated area; it is grown chiefly in the Angul sub-division. In the Khondmāls the area of embanked rice land is comparatively small; most of the best lands are cultivated by Oriyas, but the Khonds also grow some rice on the uplands and hill slopes. The crop which the Khonds chiefly affect, however, is turmeric, which is extensively grown for export. They also cultivate millets, pulses, maize and oilseeds. The area under cultivation is gradually increasing, but large tracts still remain to be brought under the plough. Loans under the Agriculturists' Loans Act

are taken in years of scarcity; in 1900-01 Rs. 17,000 was borrowed. There is abundant pasture everywhere, but the cattle are poor. Irrigation is practised by throwing embankments across the narrow valleys, the water which accumulates behind them being used for watering the fields below. There are 500 of these reservoirs in Angul.

An area of 251 square miles in the south and west of the Forests. Angul sub-division is reserved forest, and all other unoccupied lands in that area are "protected forest" covering 378 square miles. In 1903-04 the receipts of the Forest department were Rs. 5,000 and the expenditure Rs. 17,000. In the Khondmāls forests cover an area of 500 square miles, but they are not reserved or protected. The characteristic trees are *sāl* (*Shorea robusta*), *Terminalia*, such as *āsan* (*T. tomentosa*), mango, ebony and bamboos; some teak has also been planted. *Mahuā* (*Bassia latifolia*) is very common in the Khondmāls, and the fruit is eaten largely by the people. Among minor forest products are *sabai* grass (*Ischaemum angustifolium*), which is exported to the Calcutta paper mills, and catechu.

Coal-bearing rocks crop up occasionally, but they have never Minerals. yet been worked. Ironstone is found in Ohhindipadā and other villages in Angul, and at Kātrangia in the Khondmāls; it is smelted locally on a small scale in rough charcoal furnaces and bought by the village blacksmiths. Mica is also found in small quantities. Laterite is used for road metalling and limestone for the manufacture of lime.

The hand industries are cotton-weaving, basket and mat- Arts and making, iron-work and brass and bell-metal work. Cotton- weaving is carried on by the Pāns and a few Tāntis; the coarse cloth woven finds a local sale. Baskets are made by Gādras, Hāris and Doms, and mats by Hāris, Doms, Pāns and Khairās; they are sold locally and are also exported to the neighbouring States. Brass and bell-metal ornaments, *lotās* and lamps are made by Kharurās. manufactures.

Trade is principally carried on with Cuttack, but there is some Commerce. also with the surrounding States, Puri and Ganjam. The principal exports from the Angul sub-division are rice, millets, gram, lentils, catechu, molasses, oilseeds, hides and horns; and from the Khondmāls turmeric, *mahuā*, hides, horns, wax, honey and shellac. Oilseeds are sold for cash in the Angul sub-division, where the rents are largely paid from the money realised; the bulk of the other exports are bartered. The principal imports are pieco-goods, salt, spices, *ghī*, sugar, dried fish, kerosene oil, brassware and glass beads. The chief centres of trade are Angul, Sankhpur and Bāgdīā, all in the Angul sub-division. Goods are carried either in carts or by pack-bullocks. In the Khondmāls the commerce is chiefly in the hands of traders from Cuttack and

elsewhere who attend the weekly marts held at PHULBANI and Khejarpāra.

Railways
and roads.

A branch railway has been proposed from Sambalpur to Cuttack, which would probably pass along the Sonpur road on the south bank of the Mahānadī. The main roads are the Cuttack-Angul-Tikaipāra, the Cuttack-Sambalpur, the Harbhanga-Phulbani and the Russellkonda-Phulbani roads, all of which are maintained from Provincial funds; with the exception of part of the Cuttack-Angul road, they are unmetalled and unbridged. There are also 225 miles of fair-weather roads. The only ferry is one which crosses the Mahānadī at Tikaipāra.

Famine.

The District is liable to famine resulting from an irregular distribution of the rainfall. In 1889 there was serious famine caused by successive droughts and the failure not only of the regular crops, but also of those of the *mahuā* and mango trees. Rents were remitted, agricultural advances made, and relief was afforded to 25,000 people at a cost of Rs. 44,000. In 1897 the crops partially failed, and some distress was caused, which was relieved at a cost of Rs. 20,000. In 1900 scarcity recurred owing to irregular rainfall, especially in the Khondmals where a bad attack of cholera aggravated the distress. On this occasion Rs. 43,000 was spent on relief.

District
sub-
divisions
and staff.

The District is administered under a special Regulation (I of 1894). It is divided for general administrative purposes into two sub-divisions with head-quarters at Angul and Phulbani. The Deputy Commissioner is assisted by a Deputy and sub-deputy magistrate at Angul and by a sub-divisional officer in the Khondmals. The Deputy Commissioner has the powers of a Collector and is also an Assistant Superintendent of the Tributary States of Dhenkānāl, Barambā and Pāl Laharā. The other officers have the powers of a Deputy Collector.

Civil and
criminal
justice.

The Commissioner of Orissa is the High Court for the District, except in respect of criminal proceedings against European British subjects. The Deputy Commissioner has the powers of a District Magistrate, Sessions Judge and District Judge in Angul; he has also, as Assistant Superintendent, the same powers in 7 Tributary States. The Deputy Magistrate at head-quarters and the sub-divisional officer in the Khondmals have the powers of sub-divisional magistrates and of Munsifs; they are also courts of small causes under Act IX of 1887. The people are law-abiding, and serious crime is rare. Formerly blood-fueds and human sacrifices were common, but these have disappeared under British administration.

Land
revenue.

The first settlement in the Angul sub-division was made in 1855 when 86 square miles were assessed at Rs. 46,000. A fresh settlement for a term of 15 years was introduced in 1892, when the revenue was raised to Rs. 1,00,000 owing merely to

extensions of cultivation and without any enhancement of rates. The revenue is collected by village headmen (*sarbarāhkārs*), who are allowed to appropriate the profits arising from extension of cultivation during the period of the settlement. The approximate rent per acre of rice lands is R. 1-5-4 and of other lands from R. 0-8-7 to R. 1-2-2; the average rate is R. 0-11-4. The cultivators possess occupancy rights, which, however, are not transferable without the sanction of Government.

In the Khondmāls no rent is paid; a tax of 3 annas per plough is collected as a road fund, to which an equal amount is contributed by Government. The following table shows in thousands of rupees the collections of land revenue and of total revenue, under the principal heads, since the district was constituted:—

		1892-93.	1900-01.	1903-04.
Land revenue	...	60	93	87
Total revenue	...	60	1,18	1,25

The District contains 2 thānas and 6 out-posts, and the police force which is under an Assistant Superintendent of Police consisted in 1904 of 2 inspectors, 4 sub-inspectors, 144 head constables and constables, in addition to an armed police reserve of 22 men. The rural police is composed of *chaukidars*, who are remunerated by service lands. A District jail at Angul has accommodation for 101 prisoners, and a sub-jail at Phulbani for 14 prisoners.

Education is more backward than in any other District in Bengal; only 2 per cent. of the population (39 males and 0·1 females) could read and write in 1901. Considerable progress, however, is now being made, and the total number of pupils under instruction increased from 2,472 in 1892-93 to 3,121 in 1900-01, while in 1903-04, 3,842 boys and 257 girls were at school, being respectively 26·6 and 1·7 per cent. of the children of school-going age. The number of educational institutions, public and private, in 1903 was 159, including 2 secondary schools, 147 primary schools and 10 special schools. Special lower schools are maintained for the Pūns. The expenditure on education was Rs. 18,000, of which Rs. 15,000 was met from Provincial funds and Rs. 3,000 from fees.

In 1903 the District contained 3 dispensaries, of which one had accommodation for 10 in-door patients; the cases of 13,000 out-patients and 115 in-patients were treated, and 250 operations were performed. The expenditure was Rs. 7,000, which was met almost entirely by Government.

Vaccina-
tion

Vaccination is not compulsory, but considerable progress has been made, and the number of successful vaccinations in 1903-04 was 7,000, or 36·3 per thousand of the population.

[Sir W. W. Hunter, *Statistical Account of Bengal*, vol. xix, 1877.]

Angul Sub-division.—Head-quarters sub-division of Angul District, Bengal, situated between 20° 32' and 21° 10' N. and 84° 18' and 85° 43' E. with an area of 881 square miles. This tract has the general characteristics of this part of Orissa, low wooded hills enclosing cultivated valleys intersected by numerous water-courses which run dry in the summer. The south is hilly forming an outlying chain of the Sātpura range; the line of hills runs from south-west to north-east and is the watershed between the Mahānadi river on the south and the Brāhmani on the north. The population increased from 103,706 in 1891 to 127,697 in 1901, the density in the latter year being 145 persons to the square mile. The low rents have attracted settlers from the neighbouring States. The sub-division contains 453 villages but no towns; the head-quarters are at ANGUL.

Khondmāls.—Sub-division of Angul District, Bengal, situated between 20° 13' and 20° 41' N. and 83° 50' and 84° 36' E. with an area of 800 square miles. The population fell from 66,352 in 1891 to 64,214 in 1901, the decrease being due to the prevalence of cholera and other diseases, and to short crops in 1896 and 1899, which stimulated emigration. The density in 1901 was 80 persons to the square mile. The sub-division consists of a plateau 1,700 feet in height intersected by circular ranges of hills. Heavy forest still covers much of the area, and the cultivated lands lie in scattered clearings on the hill sides and in the valleys below. A range of hills 3,000 to 3,300 feet in height separates the Khondmāls from Ganjām, and forms the southern watershed of the Mahānadi. The head-quarters are at Phulbāni, and there are besides 995 villages. The Khonds, a Dravidian tribe, here survive as a distinct nationality with a history, a religion, a language and a system of law and landed property of their own. The villages are divided from each other by rugged peaks and dense forests, but a regular system of government on the aboriginal plan is maintained, the hamlets being distributed into *muthas* each under the supervision of its own chief. Throughout this wild tract, the Khonds claim an indefeasible right in the soil. At no time were they more than nominally subject to the Baud Rājā, who was totally unable to control or coerce them. They first came into prominence in the early part of the 19th century owing to the prevalence amongst them of human sacrifices and female infanticide. The human sacrifice was a propitiatory offering to the Earth-Goddess and the flesh of the victims was buried in the field to ensure good crops; it was firmly believed

that turmeric could not have a deep red colour without the shedding of blood. The victims, or *meriahs* as they were called, were purchased, as an ancient rule ordained that the *meriah* must be bought with a price. The duty of providing them rested with the Pāns, who are attached to every Khond village as serfs, and who either kidnapped them from the plains or purchased them locally. These human sacrifices were suppressed with difficulty by the British Government.

The Khonds hold their lands directly under the Government and pay no rent or tax, except a contribution of 3 annas per plough for the improvement of communications. Infant and adult marriages are both common; the girl is often older than the boy. The Khonds of the Khondmāls recognise two principal gods, Sāru Pennu and Tāru Pennu, of whom Sāru Pennu may be described as the god of the hills and Tāru Pennu as the earth god. [H. H. Risley, *Tribes and Castes of Bengal*, 1891.]

Angul Village.—Head-quarters of the District of the same name in Bengal, situated in $20^{\circ} 48' \text{ N.}$ and $84^{\circ} 59' \text{ E.}$ Population (1901) 693. Angul contains the usual public offices. The District jail has accommodation for 101 prisoners, who are employed on oil-pressing, weaving and bamboo work.

Phulbāni.—Head-quarters of the Khondmāls sub-division of the Angul District of Bengal, situated in $20^{\circ} 29' \text{ N.}$ and $84^{\circ} 16' \text{ E.}$ Population (1901) 475. Phulbāni contains the usual public offices; the sub-jail has accommodation for 14 prisoners.

Puri District.—Southern District of the Orissa Division of Bengal, lying between $19^{\circ} 28'$ and $20^{\circ} 26' \text{ N.}$ and $84^{\circ} 56'$ and $86^{\circ} 25' \text{ E.}$ with an area of 2,499* square miles. It is bounded on the north and north-east by the Cuttack District; on the south-east and south by the Bay of Bengal; on the west by the Madras District of Ganjam; and on the north-west by the Tributary States of Nayāgarh, Kanpur and Khandparā.

Its general shape is triangular, and it may be roughly divided into three tracts—west, central and east. The western extends from the right bank of the Dayā river across the stone country of Dāndimāl and Khurdā, till it rises into the hills of the Tributary States. A low range, beginning in Dompāra and running south-east in an irregular line towards the Chilka Lake, constitutes a watershed between this tract and the Mahānadi river. The most important peaks are in the Khurdā sub-division. On the north of the Chilka they become bold and very varied in shape and throw out spurs and promontories into the lake, forming island-studded bays, with fertile valleys running far inland between their ridges. The middle and eastern divisions consist entirely of alluvial plains,

* The area shown in the census report of 1901 was 2,472 square miles; that given above is taken partly from a report of the District Magistrate and partly from page 47 of the Orissa Settlement Report. 014

Boundaries, configuration and river system.

the south-western part of the Mahānadi delta. They are watered by a net-work of channels through which the most southerly branch of that river, the Koyākhai, finds its way into the sea. The middle tract comprises the richest and most populous portion of the District; the eastern is less thickly peopled and in the extreme east loses itself in the jungles around the mouths of the Devi. The following scheme briefly shows the river system of the District:—

Koyākhai	{	Kushbbhadra	{	Prūchī ...	{	Kushbbhadra...	Bay of Bengal.
			Kushbbhadra				
	{	Bhārgavi	{	Bhārgavi ...	{	Bhārgavi ...	Chilka Lake.
			{	Nūn ...		Nūn ...	
			{	Dayā ...	{	Dayā ...	

Only one of these rivers, the Kushbbhadra, enters the sea. It follows a very winding course and is of little value for navigation. Its bed has silted up, and in seasons of heavy rainfall its floods devastate the surrounding country. The three rivers most important to the people of Puri are the Bhārgavi, the Dayā and the Nūn, which all enter the Chilka Lake, after running widely diverse courses. In the dry weather they die away into long shallow pools in the midst of winding stretches of sand, but in the rainy season they come down with a great rush of water that often threatens to burst the banks and inundate the surrounding country. Their banks are generally abrupt, and in many parts are artificially raised and strengthened as a protection against floods. The coast line consists of a belt of sandy ridges, varying from 4 miles to a few hundred yards in breadth. It contains no harbours of any importance. Puri port is simply an unprotected roadstead, open from the middle of September to the middle of March. During the remainder of the year the surf does not allow of vessels being laden or unladen. The principal lakes are the CHILKA and the Sar. The latter is a backwater of the river Bhārgavi and is 4 miles long by 2 broad. It has no outlet to the sea, from which it is separated by sandy ridges.

Geology.

Some of the hills are composed of compact gneiss, most of the others being of garnetiferous rock with occasional bands of quartzose gneiss. Laterite forms a raised terrace-like plain around the hills, except a few which occur far out in the alluvium, and it probably underlies the whole of the recent alluvium which covers the eastern portion of the District. On the southern bank of the Chilka lake, in one or two places at an elevation of 20 to 30 feet above the present flood-level, is found a bed of mud with estuarine shells evidencing an elevation of the land since the comparatively recent period when the Chilka had a freer communication with the sea than it now has. A similar deposit occurs at some places on the spit between the Chilka and the sea.*

* Memoirs, Geological Survey of India, vol. i, Part III, The Geological Structure and Physical Features of the Districts of BĒNKURĀ, MIDNAPURĒ and ORISSĀ, and Records, Geological Survey of India, vol. v, Sketch of the Geology of Orissā by W. T. Blanford.

In the Mahanadi delta, swampy places near the sea have on the banks of rivers and creeks the vegetation of a mangrove forest. Where sand dunes intervene between the sea and the cultivated land behind, an equally characteristic littoral vegetation is met with, the principal species of which are *Spinifer*, *Hydrophyta* and *Geniosporum prostratum*. The cultivated land has the usual rice-field weeds, while ponds and ditches are filled with floating water weeds or submerged water plants. Near human habitations shrubberies of semi-spontaneous shrubs are common, and are loaded with a tangled mass of climbing *Convolvulaceæ*. The arborescent portion of these village shrubberies includes the red cotton tree (*Bombax malabaricum*), *gijal* (*Odina rodies*), *Tamarindus indica*, *Moringa*, *Pterygo-pirna*, *ripal* (*Ficus religiosa*), banyan (*Ficus Bengalensis*), *Borassus flabellifer* and *khajūr* (*Phoenix sylvestris*). In the north-west of the District some forests are under the control of the Forest department; these are described below.

Game is plentiful, but in the open part of the country the Fauna. larger wild beasts have been nearly exterminated.

The Puri District is directly on the track of the cyclonic storms which cross Orissa frequently during the monsoon season, but on the whole the sea breezes ensure an equable climate. In April and May the average maximum temperature is 89°. The mean temperature falls from 86° in the hot months to 84° in the monsoon season and to 77° in February. Cyclonic storms occasionally occur in the north of the Bay in May, and with these storms weather of the south west monsoon type prevails. The humidity ranges from 75 per cent. in December to 86 per cent. in August. The average annual rainfall is 58 inches, of which 8·4 inches fall in June, 10·9 in July, 12·1 in August and 10·7 in September.

Climate
and tem-
perature.

The river channels near the coast can only carry off a small proportion of the flood-water which enters the District through the Koyakhai, and the District is liable to disastrous floods. In 24 of the 32 years ending in 1866, such serious floods occurred as to require remissions of revenue, exceeding 4 lakhs, while more than 3½ lakhs was expended by Government on embankments and other protective works. In 1866 more than 412,000 persons were driven by the floods from house and home. The years 1872, 1892 and 1896 were also memorable for high floods, that of 1892 being remarkable for its severity and that of 1896 for its duration. At such times the embankments are of little use, as they are either breached or overtopped. Proposals have been made to limit the floods entering the Koyakhai, but the cost of the schemes hitherto formulated is prohibitive.

Natural
calamities.

The general history of Puri is that of ORISSA. The only two noteworthy political events that have taken place since the History.

District passed to the British; together with the rest of the province in 1803, are the rebellion of the Rājā of Khurdā in 1804 and the rising of the *paiks* in 1817. The Rājā of Khurdā, although stripped of a considerable portion of his territory, had been left by the Marāthās in comparative independence within his own fort. When the British entered the province, the Rājā passively espoused their cause, and the decision of the Commissioners to retain the *parganas* taken by the Marāthās was acquiesced in by him. But after the European troops had returned to Madras and the native force at Outtack had been considerably reduced by the necessity of establishing detached outposts in different parts of the country, the Rājā's mob of *paiks* and peons made a raid on the villages in the vicinity of Piplī. Troops were summoned from Ganjam and a detachment was quickly despatched from Outtack. The rebels, driven out of Piplī, retreated to the fort at Khurdā followed by our troops. In three weeks the approaches, which were stockaded and fortified with strong masonry barriers, were carried by storm. The Rājā made his escape, but surrendered a few days later. His territory was confiscated, and he was kept in confinement until 1807, when he was released and allowed to reside in Puri, and an allowance was made for his maintenance.

In 1817 the *paiks* or landed militia rose in open rebellion against the oppressions suffered at the hands of the underlings to whom was entrusted the collection of the revenue, and also against the tyrannies of a venal police. The rebels, led by one Jagabandhu, attacked the police station and Government offices at Bānpur, where they killed upwards of a hundred men and carried off about Rs. 30,000 of treasure. The civil buildings at Khurdā were burnt to the ground, and another body of the insurgents advanced into Lembai *pargana* and murdered one of the native officials. The authorities at Outtack at once despatched a force, one detachment of which marched direct to Khurdā, and another to Piplī. After some severe fighting British authority soon re-established itself everywhere. The Rājā, who had joined the rebels, was captured in Puri town, as he was on the point of taking flight, and was removed to Calcutta and placed in confinement in Fort William, where he died in November 1817. The country was gradually restored to order and tranquillity, and, at the present day, Khurdā is a profitable Government property, and the cultivators are a contented and prosperous class. The father of the present Rājā of Puri was convicted in 1878 of murder and sentenced to penal servitude for life. The present Rājā is the superintendent of the temple of Jagannāth, but has delegated all his powers as such to an experienced Deputy Magistrate-Collector for a period of 5 years.

The District contains numerous antiquities of surpassing interest, of which the most important are the great temple of Jagannāth in PURI town, the caves and rock sculptures at KHANDGIRI and Udayagiri, the *Lingarāj* temple and other remains at BHUBANESWAR, the black pagoda at KONARAK and the Asoka inscription at DHANULI. Archæology 7

The population increased from 769,779 in 1872 to 888,592 in 1881, to 944,998 in 1891 and to 1,017,284 in 1901. The public health has not been good since 1891. Cholera is imported annually by pilgrims, fever is prevalent during the cold weather, while small-pox occasionally appears in a virulent form. The salient statistics of the census of 1901 are reproduced below:—

SUB DIVISION.	Area in square miles.	NUMBER OF		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Puri	1,528	1	1,689	658,648	431	+ 7.2	49,044
Khonds	971	...	1,212	530,235	370	+ 8.4	23,023
DISTRICT TOTAL	2,499	1	3,101	1,017,284	407	+ 7.6	72,867

The only town is Puri, the head-quarters. The density for the whole District is lower than it would otherwise be owing to the inclusion of the area of the Chilka lake, the population of the head-quarters thāna in which the greater part of it is situated being only 254 persons to the square mile against 753 in Pipli. Pilgrims were exceptionally numerous at the time when the last census was taken, but apart from this the ebb and flow of population is very slight. The vernacular of the District is Oriyā. Buddhism, for 10 centuries the prevailing religion of Orissa, has left no traces beyond the cave dwellings of the hermits and some recently deciphered inscriptions. Sun worship was one of the principal forms into which Buddhism disintegrated, and its most exquisite memorial is the temple of Konārak. At the present day (1901) no less than 98.2 per cent. of the population are Hindus, while 1.7 per cent. are Muhammadans.

Chāsas, the chief cultivating caste of Orissa, number 300,000, Thoir castes and occupations.
 Brāhmins 101,000, Bauris 84,000, Gauras 53,000, Guriās 26,000, and Karans and Kewats 33,000 each. The Guriās are the confectioner and the Karans the writer caste of Orissa. Of the less common castes two hill tribes, the Khonds and Savars, have a few representatives, Kumutis are a caste practically confined to Puri and the Orissa Tributary States, and Daitās and Kāhalins are small castes peculiar to this District. Christians number

1,978, of whom 913 are natives; the only mission is the Baptist Mission with stations at Purī town and 6 other places. Of the population 60 per cent. are supported by agriculture, 16·5 per cent. by industries, 0·4 per cent. by commerce and 4·0 by the professions.

General
agricul-
tural con-
ditions.

The greater part of the head-quarters sub-division is subject to floods, and except in the west, where the sub-division encroaches on the laterite uplands of Khurdā, and along the sea shore in the south and east, where the sand forms a belt of varying width, the soil is of the normal alluvial type, consisting of every variety of mixture from almost pure sand to almost pure mud. In the north sandy loams are most common, while in the lower levels of the southern *paigana* black soils are more general. The surface of the Khurdā sub-division is composed of the detritus of metamorphic rock, sandstone and vegetable mould, and is therefore for the most part fertile.

The salient agricultural statistics for 1903-04 are reproduced below, areas being in square miles :—

Chief
agricul-
tural sta-
tistics and
principal
crops.

SUB-DIVISION.	Total.	Cultivated.	Culturable waste.	Forests.
Purī ...	1,529	636	26	369
Khurdā ...	971	536	222	113
TOTAL ..	2,499	1,172	249	482

Rice is the staple food grain and covers 1,030 square miles or 87 per cent. of the cultivated area. The most important variety is the *sarad* or winter crop, which is grown on 923 square miles; early rice (*biāṭ*) and spring rice (*dālma*) are also cultivated, but the proportions are small. The winter rice, which is for the most part transplanted from seedlings, is divided into 3 classes known as *bara*, *mājhlā* and *laghu* according to the amount of water required. Pulses occupy 124 square miles or 11 per cent. of the total cultivated area, the chief crops being *kurthi*, *mūng* and *birhi*. *Marua* is grown in parts, chiefly as a second crop; and castor oil, sugarcane, cotton, indigo, *pān*, tobacco and vegetables, though occupying small areas, possess some importance.

Improvements in
agricul-
tural
practice.

Cultivation has steadily extended since the settlement of 1837, except in a few tracts where it has been checked by the calamitous floods of recent years. Agricultural experiments have been set on foot in the Khurdā Government estate, but the ryots are slow to adopt improvements. Cow-dung is generally used as manure. During the 10 years ending in 1902 Rs. 48,000 was advanced under the Agriculturists' Loans Act and Rs. 25,000 under the Land Improvement Loans Act.

The cattle are similar to those found in the southern Districts Cattle. of Lower Bengal. In the head-quarters about 4 per cent. of the whole area at the recent settlement was set apart in each village for grazing purposes.

Irrigation is little resorted to except for the spring rice and Irrigation. the February pulse crops. The water is derived from the Sar lake and various big reservoirs and tanks, and is raised by a mat scoop, a hollow tree trunk (*jantā*) or by unglazed earthen pots fixed to a bamboo lever (*tendā*).

The forests of the Purī forest division lie within what Forests. is technically known as the dry evergreen forest zone and comprise *sāl* and mixed forest. They consist of 110 square miles of reserved and 371 square miles of protected forests in the Khurdā Government estate. In the metamorphic region to the south-west the *sāl* (*Shorea robusta*) is seen at its best, its chief companions being *ablus* (*Diospyros melanoxylon*), *Caryya arborea*, *deau* (*Terminalia tomentosa*) and *Buchanania latifolia*. In the mixed forest the chief species are the *Anogeissus latifolia*, *figul* (*Odina cordier*), *kusum* (*Schleichera trifuga*), *Pterospermum anberifolium* and *Dillenia Pentagyna*, while in the north-west *Hylin delabriformis* (the ironwood tree of Pegu and Arakan) is extremely common. Of bamboos *Bambusa arundinacea* and *Dendrocalamus strictus* are common. Climbers are numerous, the most noticeable being *Bauhinia Vahlī*, *Milletia auriculata*, *Entada scandens*, and *Combretum decandrum*. Teak is being planted with fair success. *Strychnos nux* comici seed is collected by the department for sale, and *kamalagunji* powder (*Mallotus Philippinensis*) is gathered as a dye. The total receipts of the Forest department in 1903-04 were Rs. 39,000.

Laterite, lime and sandstone are found in the Khurdā sub- Minerals. division, but no quarries are regularly worked.

Tassar and cotton cloth, brass and bell-metal utensils, brass, Arts and gold and silver ornaments, and wicker-work baskets are manu- manu- factured. Images of the Hindu gods are carved in stone, often with a considerable degree of skill. Coarse sugar is prepared from sugarcane.

The chief exports are rice, gram, pulse, unrefined sugar, Commerce. coco-nuts, brass and silk, and the chief imports are raw cotton, cotton piece-goods, refined sugar, spices, nuts, iron, tobacco, koroseno oil, salt and copper. Purī town, Satyabādī, Pipli, Bālkāti, Khurdā and Bānpur are the chief centres of trade. Rice is shipped in considerable quantities from Purī for the Madras ports and for Colombo and Mauritius, the value of the trade to Colombo and Mauritius in 1903-04 being 6.55 lakhs. With this exception, nearly the whole of the external trade has been absorbed by the railway. In the rains some traffic is carried up and down the rivers in country boats. Trade is chiefly in the hands of people of the Brāhman, Telī, Gurīā and Tāntī castes.

Railways
and roads.

The Bengal-Nāgpur Railway passes through the entire length of the Khurdā sub-division. A branch line 28 miles in length connects Purī town with Khurdā road. The District is well supplied with roads, the principal being the pilgrim road from Cuttack to Purī and the Cuttack-Ganjam road, which traverses the whole length of the Khurdā sub-division. These are linked together by 2 important cross roads, viz., the metalled road from Piplī to Khurdā, connecting these places with the railway at Khurdā road station, and the Pātnaikā-Khurdā road. All these roads are metalled. Other important roads are those running westwards from Khurdā to the Central Provinces and the road from Mādhav to Purī *via* Gop, a continuation of the Cuttack District road, which takes off from the pilgrim road at Mādhav. The Cuttack-Purī and the Cuttack-Ganjam roads with a length of 107½ miles are maintained by the Public Works department; while 108 miles of metalled and 114 miles of unmetalled roads are under the control of the District board. The Kushbbhadra, Bhārgavī and Dayā rivers are navigable for several months of the year. The most important ferries are those where the Ganjam and Purī Trunk Roads cross the large rivers.

Famine.

The greatest famine within living memory is that of 1866, which was felt with more intensity in Purī than in either Cuttack or Balasore. In 1865 the rice crop had utterly failed. The average rainfall in the District is about 58 inches, but in that year only 36·3 inches fell, of which only 5·2 inches fell in September and none at all subsequently. The local supply of rice was wholly inadequate, and prices rose rapidly. Government was compelled to import rice, but in June 1866 it was selling at 6 seers a rupee, and even when supplies of rice began to find their way into the District, the quantities received were so small that it was impossible to carry on the relief operations without a break. In August the widespread distress was aggravated by a severe inundation and the mortality became appalling. The position began to improve in November, when large supplies of rice were received, but in certain tracts gratuitous relief had to be continued for many months longer. In October 1866 it was reported that 210,866 deaths had occurred during the year. These figures, imperfect as they probably are, give a mortality of no less than 36 per cent. The total quantity of grain imported by Government into Purī in 1866 amounted to 47,383 maunds; of this 16,626 maunds were gratuitously distributed and 5,940 were sold at cheap rates. A sum of Rs. 1,03,000 was expended by the Public Works department in providing work for the distressed.

Scarcities have since occurred in 1884, 1885, 1888 and 1897. During 1896 the rainfall was unseasonable and badly distributed, and some parts of the District were visited by an insect pest.

The area affected was 365 square miles with a population of 102,000 persons, chiefly near the Chilka Lake. Relief operations were opened in February and closed in September 1897. The total recorded mortality during this period was 4,231. Rs. 21,000 was spent on relief, of which Rs. 18,000 was contributed from charitable funds. The number of persons relieved was 42,455. In addition Rs. 15,000 was advanced to the Rājā of Parikūd for the repairs of the embankments in his estate, and Rs. 18,000 was distributed in loans to the cultivators to enable them to sow their lands; Rs. 80,000 of rent was remitted and suspensions of the demand were granted to the extent of Rs. 65,000.

For general administrative purposes the District is divided into 2 sub-divisions with head-quarters at PURI and KHURDĀ. The administrative staff at Puri, subordinate to the District Magistrate-Collector, consists of 3 Deputy Magistrate-Collectors; the sub-divisional officer of Khurdā is a Deputy Magistrate-Collector, and he is assisted by a Deputy-Collector and a sub deputy-collector. An Inspector of salt is stationed at Puri, and a Deputy Conservator of Forests at Khurdā.

District
sub-divi-
sions and
staff.

The District and Sessions Judge is also Judge of Cuttack and Balasore; the only other civil court is that of a Munsif at Puri, assisted occasionally by an additional Munsif from Cuttack. The criminal courts include those of the Sessions Judge, the District Magistrate, and the above mentioned Deputy Magistrates. The Oriyas are generally a law-abiding people, and organized crime by professional criminals is almost unknown; it has hitherto been confined to occasional drugging and robbing of pilgrims on the road to Jagannāth and to an occasional dacoity.

Civil and
criminal
justice.

Under British rule the first settlement of land revenue, excluding Khurdā, was made in 1804-05 on the basis of the assessment papers obtained from the record-keeper and sadar *kārungo* of the Marāthās. Puri at this time formed part of the southern division of Orissa, or the tract south of the Mahānadi. In 1837 a settlement was made for 30 years; this expired in 1867, but owing to the recent famine, it was extended till 1897; a new settlement for 30 years was then made with effect from 1899, with a current demand of 3·77 lakhs. These figures, as already stated, exclude the Khurdā Government estate, the area of which is 1,013 square miles, of which all but 42 square miles lie in and constitute the Khurdā sub-division. The current settlement is for 15 years from 1897; the demand from this estate is 3·27 lakhs. The total land revenue demand of the District in 1903-04 was 7·27 lakhs, of which Rs. 10,000 was payable by 3 permanently settled estates, 2·60 lakhs by 483 temporarily settled estates and 4·57 lakhs by 4 estates held direct by Government. There are in many cases intermediate tenure-holders with quasi-proprietary rights; these are known as *mukaddams*, *padhāns*, *sarbardālikārs* and *pursothīs*.

Land
revenue.

and are survivals of the tenures existing before the first British settlement, described in the article on Currauck District. The average area held by a ryot is about 2 acres, and the incidence of rent per acre is R. 1-10-0 in the Khurdā estate against R. 1-11-7 in the remainder of the District, the average rate varying from R. 1-7-3 for non-occupancy ryots to R. 1-15-5 for settled and occupancy ryots; the rate on homestead lands is Rs. 6-9-8 per acre.

The following table shows the collections of land revenue and of total revenue, under the principal heads, in thousands of rupees:—

	1880-81.	1890-91.	1900-01.	1903-04
Land revenue ...	4,64	6,56	7,74	7,51
Total revenue ...	6,44	9,16	11,41	11,77

Local and
municipal
govern-
ment.

Outside the municipality of Puri the management of local affairs rests with the District board, to which sub-divisional local boards are subordinate. In 1903-04 its income was Rs. 82,000, of which Rs. 35,000 was derived from rates, and the expenditure was Rs. 85,000, including Rs. 40,000 spent on civil works and Rs. 30,000 on education.

Police and
jails.

The District contains 6 police stations and 19 outposts, and in 1903 the force subordinate to the District Superintendent of Police consisted of 3 inspectors, 32 sub-inspectors, 31 head-constables and 380 constables; there was, in addition, a rural police force of 211 *daffadārs* and 2,149 *chaukidārs*. The District jail at Puri has accommodation for 120 prisoners, and a subsidiary jail at Khurdā for 10.

Education.

In 1901, 6·2 per cent. of the population (13·9 males and 4 females) could read and write. The number of pupils under instruction was about 20,000; in 1884, 20,964 in 1892-93 and 20,902 in 1900-01. In 1903-04, 24,342 boys and 2,442 girls were at school, being respectively 32·0 and 3·1 per cent. of the children of school-going age. The number of educational institutions, public and private, in that year was 2,033, including 22 secondary schools, 1,384 primary schools and 627 special schools. The chief educational institution is the Puri District school; for the education of aborigines and depressed tribes 4 lower primary schools are maintained. The expenditure on education was Rs. 1,22,000, of which Rs. 17,000 was met from Provincial funds, Rs. 30,000 from District funds, Rs. 1,150 from municipal funds and Rs. 62,000 from fees.

In 1903 the District contained 11 dispensaries, of which Medical. 8 had accommodation for 150 in-door patients; the cases of 53,000 out-patients and 1,200 in-patients were treated, and 2,000 operations were performed. The expenditure was Rs. 17,000, of which Rs. 1,600 was met by Government contributions, Rs. 12,000 from local and Rs. 4,000 from municipal funds, and Rs. 700 from subscriptions.

The District often suffers severely from small-pox, the average death-rate from this cause during the last quinquennium being 2.21 per mille. Vaccination is compulsory only in Puri municipality. The people generally are averse to vaccination, but in spite of this the number of successful vaccinations rose in 1903-04 to 48,000 or 49 per thousand of the population.

[B. K. Ghosh, *History of Puri with an account of Jagannāth*, Cuttack, 1848; W. W. Hunter, *Orissa*, 1872, and *Statistical Account of Bengal*, vol. xviii, 1877; W. H. Lee, *History of Puri*, Calcutta, 1898, and *Inscriptions in the District of Puri*, Cuttack, 1898; J. Taylor, *Settlement Report of Khurda estate*, Calcutta, 1900; S. L. Maddox, *Settlement Report of Orissa*, Calcutta, 1900.]

Puri Sub-division.—Head-quarters sub-division of Puri District, Bengal, lying between $19^{\circ} 28'$ and $20^{\circ} 23'$ N., and $85^{\circ} 8'$ and $86^{\circ} 25'$ E., with an area of 1,528 square miles. Its population was 658,048 in 1901, compared with 613,575 in 1891, the density being 431 persons to the square mile. The sub-division forms the south-western section of the Mahānadi delta, and consists almost entirely of alluvial country stretching from the Eastern Ghāts to the Bay of Bengal. It contains one town Puri, its head-quarters (population 49,334), and 1,839 villages. The famous temple of Jagannāth is situated in Puri town, while other important antiquities are the black pagoda at KONARAK and the Asoka inscription at DHANULI. The Chilka Lake in the south-west corner of the sub-division occupies about one-fifth of its total area.

Khurda Sub-division.—Western sub-division of the Puri District, Bengal, lying between $19^{\circ} 41'$ and $20^{\circ} 26'$ N., and $84^{\circ} 56'$ and $85^{\circ} 53'$ E., with an area of 971 square miles. Its population was 359,236 in 1901, compared with 331,423 in 1891, the density being 370 persons to the square mile. The sub-division adjoins the south-eastern fringe of the Chota Nāgpur plateau, and detached hills of gneiss occur, the plains between them consisting of laterite and alluvium. It contains 1,212 villages, one of which, KHURDA, is its head-quarters, but no towns. At BHUBANESWAR are situated the celebrated *Lingarāj* temple and numerous other temples, and the KHANDGIRI and Udayagiri hills contain many caves and rock temples.

Khurda formed the last portion of territory held by the independent Hindu dynasty of Orissa. The Marāthā cavalry

were unable to overrun this jungle-covered and hilly tract, and the ancient royal house retained much of its independence till 1804, when the Rājā rebelled against the British Government, and his territory was confiscated. A rising on the part of the peasantry took place in 1817-18, due chiefly to the oppression of the minor Bengali officials. The insurrection was speedily quelled, reforms were introduced and grievances redressed, and at the present day Khurdā is a profitable and well managed Government estate, and the cultivators are a contented and generally prosperous class. The current settlement dates from 1897, when the demand was assessed at 3·77 lakhs. The present Rājā of Khurdā is superintendent of the temple of Jaganāth, but has delegated all his powers as such for 5 years to an experienced Deputy Magistrate-Collector. [J. Taylor, *Settlement Report*, Calcutta, 1900.]

Bhubaneswar.—The temple city of Siva in the Khurdā sub-division of Puri District, Bengal, situated in 20° 15' N. and 85° 50' E. 3 miles from the Bengal-Nāgpur Railway. Population (1901) 3,053. Its traditions date from remote antiquity; when it was distinguished for nothing more than a single mango tree (*ekāmraṇa*), whence the name *Ekāmratīrtha*.

Bhubaneswar was the great seat of Saivism in Orissa and all the great temples here are consecrated to the *lingam*, the emblem of the great God Mahādeo. It is said that it was originally intended as a rival of Benares and that no details were omitted to make it an exact counterpart of its prototype. Tradition attributes the foundation of the various temples at Bhubaneswar to the kings of the Kesarī dynasty, who are supposed to have ruled over Orissa from the sixth to the 12th century A. D. ; but the existence of this dynasty is doubtful, and the only true dates known with some certainty are those of the temples of Brahmeswar, Megheswar, and Ananta Bāsudeva, all of which were built towards the end of the 12th century. With regard to the remainder, we are left entirely in the dark; but it may well be surmised that the sanctity of the place and of many of its holy shrines goes back to much earlier ages. According to popular belief, seven thousand shrines once clustered round the sacred lake of Bhubaneswar; but at present scarcely more than one hundred remain. They exhibit a variety of architectural types, some being plain single towers, others having porches and halls in front with elaborate mouldings.

The best and most interesting specimens among the vast number of ancient temples at this famous place are the following:—the great *Lingarāj* temple, with the temple of Bhagavati within its compound, the temple of Ananta Bāsudeva, the temple of Mukteswar, the Rājā-Ranī temple, the temple of Brahmeswar, the temple of Bhāskareswar, the *Vaitālā deul*, the temple of Parasu Bāmeswar. The *Lingarāj* temple stands within a large courtyard

surrounded by a high wall. The temple includes a suite of four buildings standing in file, called the *deul* or temple proper, the *mohan* or porch, the *bhogmandir* or refectory, and the *nāṭmandir* or dancing hall. Of these the first two were built at the same time and in a style quite different from the others, which were built long after at different times and on different places. The form in which Bhubaneswar (Lord of the Universe) is represented in the sanctuary is that of a huge uncarved block of granite called the *lingam*, about 8 feet in diameter and rising 8 inches above the level of the floor. It is half buried in the centre of the room, and is surrounded by a raised rim of block chlorite ending on the north side in a point. This rim is called the *yoni* or the female emblem. All these temples have recently been repaired by Government and are now in a fair state of preservation. The temple of Bhāskareswar is a unique structure, with a huge stone *lingam* inside reaching from the ground to the upper story of the temple. The town also contains 3 sacred tanks, the Bindu Sāgar or Gosāgar, measuring 1,400 by 1,100 feet, the Sahasra *lingam* and the Pāpānasīnī. [*List of Ancient Monuments in Bengal*, Calcutta, 1896, and *Report of the Archaeological Survey of India for 1903-03*, Calcutta, 1904.]

Dhauli.—Hill in the Khurdā sub-division of Puri District, Bengal, situated in 20° 15' N. and 85° 50' E. about 7 miles south of Bhubaneswar. On the northern side of the hill is a version of the famous rock edicts of Asoka. As in the version of Jaugada in the neighbouring District of Ganjam the 12th and 13th edicts have been left out, and in their place two separate edicts have been inserted. Above the inscription the fore-part of an elephant has been carved out of the rock. The hill contains a number of plain caves, and has a temple of Mahādeo on its summit.

Khandgiri.—Hill in the Khurdā sub-division of Puri District, Bengal, situated in 20° 16' N. and 85° 47' E. about 4 miles west of Bhubaneswar. It consists of two separate peaks, the northern one of which is called Udayagiri and the southern Khandgiri, the last name being also applied to the entire group. The caves on this hill were occupied by monks of the Jain sect, and not, as is usually stated, by Buddhists. The earliest of them go back to the time of king Khāravela, whose large but mutilated inscription over the Hāthi Gumpā cave is dated in the year 166 of the Maurya era, or 155 B. C.; and there are also short inscriptions of his queen and immediate successors. Various mediæval Jain carvings and inscriptions show that the Jains continued to occupy the caves till about the 12th or 13th century, and there still exist later Jain temples, one of which, on the top of the Khandgiri peak, is annually visited by Jain merchants from Cuttack. Of the oldest caves the most interesting are the following :—On the Udayagiri peak, (1) the Rānī Gumpā,

comprising two stories with open verandahs. The frieze of the upper verandah contains a series of relief carvings, evidently representing one connected story, in which occurred a fight with wild elephants, the rape of a female, and a hunt after a winged antelope; the legend to which it refers has not yet, however, been traced. (2) The Ganesh Gumphā, with a carved frieze representing the same story as in the Rānī Gumphā; the steps of the cave are flanked by the figures of two elephants. (3) The Hālā Gumphā, with the famous inscription of king Khārayola, a purely historical record of the principal events of his life. Unfortunately it has been badly mutilated, but it has recently been protected by a shade to preserve it from further destruction. (4) The Bāgh Gumphā, shaped like the head of a tiger; and (5) the Svarga Gumphā, (6) the Manjapuri, and (7) the Pātāl Gumphā, three caves raised one above the other and consequently now explained as a representation of heaven, earth and hell. On the Khandgiri peak, the most notable of the old caves are the Ananta Gumphā, with carved panels over its gates, representing Lakshmi, the sun-god, an elephant and the worship of a sacred tree; the Tentulī Gumphā, so called from a tamarind tree close to it; and the Tantuā Gumphā I and Tantuā Gumphā II, one above the other. The name *tantua* means a diving bird and has been given to these caves on account of the figures of birds, with their heads bent down as if in the act of diving, which have been carved over the arches of the doors. The best specimens of mediæval caves are: the Navamuni cave, with an inscription dated in the 18th year of king Uddyota Kesari, who preceded the Ganga kings of Orissa and belonged to the family of the so-called Somavansi, or kings of the lunar race, who ruled over Orissa in the 10th and 11th century; and the Sāṭghara cave, which has numerous mediæval Jain figures carved over its walls [*Report of the Archaeological Survey of India for 1902-03*, Calcutta, 1904.]

Khurdā Village—Head-quarters of the sub-division of the same name, Purī District, Bengal, situated in 20° 11' N. and 85° 38' E. on the high road from Cuttack to Ganjam in Madras, and connected by road with the Bengal-Nāgpur Railway. Population (1901) 3,424. Between 1813 and 1828 Khurdā was the head-quarters of the Purī District, transferred in the latter year to Purī town. Khurdā contains the usual public offices; the sub-jail has accommodation for 10 prisoners.

Konārak.—Ruined temple in the head-quarters sub-division of Purī District, Bengal, situated in 19° 53' N. and 86° 6' E. about 1½ mile from the sea and 21 miles east of Purī town. The temple was built and dedicated to the sun-god by Narasingha Deva I of the Ganga dynasty of Orissa who ruled from 1238—64; Konākona appears to have been the ancient

name, and the modern name thus stands for *Konāika*, meaning the *arka* (sun-god) at Kona. It consisted of a tower, probably a little over 180 feet in height, and of a porch or *mandap* in front of it, about 140 feet high. The principal gate was to the east, and was flanked by the figures of two lions, mounted upon elephants. The northern and southern gates were sculptured with the figures of two elephants, each lifting up a man with his trunk, and of two horses, richly caparisoned and led by warriors. Each gate was faced by exquisite chlorite carvings, of which those of the eastern gate are still in perfect preservation. Above this gate was an enormous chlorite slab, bearing the figures of the nine planets, which is now lying a little way from the temple and has become an object of local worship; and above this slab there was originally a statue of the sun-god, seated cross-legged in a niche. Along the plinth are eight wheels and seven horses, carved in the stone, the temple being represented as the car of the sun-god drawn by his seven chargers. East of the *mandap*, or porch, stands a fine square building with four pillars inside, which evidently was used as a dancing hall, as the carvings on its walls all represent dancing girls and musicians. The wall of the courtyard measures about 500 by 300 feet; and it originally contained a number of smaller shrines and out-houses, of which only the remains can now be traced. The entire courtyard till recently was filled with sand, but since 1902 Government has carried on systematic excavations, which have brought to light many hidden parts of the temple itself and of other structures. The great tower of the temple collapsed long ago, and at the present day forms a huge heap of debris west of the porch; but it is believed that about one-third of it will be found intact below the broken stones, as soon as they have been removed. In order to preserve the porch, it has been filled up with broken stones and sand, and is now entirely closed from view; its interior was plain and of little interest. In spite of its ruinous state, the temple still forms one of the most glorious examples of Hindu architecture. Even the fact that many of the carvings around its walls are very repulsive to European notions of decency cannot detract from the beauty of an edifice of which Abul-Fazl said that "even those whose judgment is critical and who are difficult to please, stood astonished at its sight." [Rajendralāla Mitra, *The Antiquities of Orissa*, Calcutta, 1875, 1880; and *The Reports of the Archaeological Survey of India for 1902-03 and 1903-04*, Calcutta, 1904, 1906.]

Puri Town.—Head-quarters town of Puri District, Bengal, situated in $19^{\circ} 45' N.$ and $85^{\circ} 49' E$ on the coast. It is celebrated as the site of the great temple of Jagannāth, by which name it is commonly known. The population, which was 22,695 in 1872 and 22,095 in 1881, increased to 28,791 in 1891 and to 49,331 in 1901.

During the great festivals the population is swollen by many thousands of pilgrims, and on the occasion of the census of 1901 over 17,000 were present in the town. The ordinary resident population is therefore about 32,000. The number of houses in 1901 was 7,521. Puri was constituted a municipality in 1881. The average income for the decade ending in 1901-02 was Rs. 44,000 and the expenditure Rs. 36,000. In 1903-04 the income was Rs. 61,000, of which Rs. 19,000 was derived from a tax on houses and lands (or property tax) and Rs. 12,000 from a conservancy rate, and the expenditure was Rs. 47,000.

Puri is a city of lodging houses, being destitute alike of manufactures or commerce on any considerable scale. The streets are mean and narrow, with the exception of the principal avenue which leads from the temple to the country house of Jagannāth. The houses are built of wattle covered with clay, raised on platforms of hard mud about 4 feet high, and many of them gaily painted with Hindu gods or with scenes from the Sanskrit epics. The intervening sand hills between the town and the beach intercept the drainage and aggravate the diseases to which the overcrowding of the pilgrims gives rise. A number of measures have recently been taken for the improvement of the sanitary condition of the town. To prevent overcrowding, tin sheds and rest-houses have been erected for the accommodation of excess pilgrims; arrangements are being made to shelter indigent lepers; steps have been taken to clean the Swetganga tank by means of a pulsometer pump and the water is used to flush the drains along the Baradand; and a complete drainage scheme for the town is in contemplation. The opening of the railway, has greatly mitigated the dangers of the journey. Formerly thousands of pilgrims used to die annually upon the road from exhaustion and want of food. But now pilgrims visit Puri at all times during the year, and this has affected the number that flock to the town during the two chief festivals. Moreover, many pilgrims now hasten away as soon as the gods have left the temple and the dragging of the cars has commenced. For the poorer pilgrims who have to make the journey on foot, pilgrim hospitals have been opened along the main lines of road, and a medical patrol has been established in the vicinity of the holy city. The great difficulty has been to check the over-crowding in Puri town, but much good has resulted from the working of the Puri Lodging-House Act (Bengal Act IV of 1871).

The Government offices stand on the beach, with a sandy ridge between them and the town. The site is salubrious and the monsoon blows so fresh and cool from the sea, that in former days the officials from Cuttack used regularly to come to Puri during the hot weather. During the rains it is less healthy. The District jail has accommodation for 126 prisoners who

are employed on oil pressing and the manufacture of coir yarn: The chief educational institutions are the District school, to which is attached a hostel for non-resident students, the Haras Chandi Sahi middle school for the sons of the *pāndās* or priests of Jagannāth, and the Puri Sanskrit school.

The shrine of Jagannāth is the region of pilgrimage beloved of Vishnu, known to every hamlet throughout India as the abode of Jagannāth, the Lord of the World. According to tradition, Jagannāth made his first historical appearance in the year 318 A. D., when the priests fled with the sacred image and left an empty city to Rakla Bāhu and his buccaneers. For 1½ centuries the idol remained buried in the western jungles till a pious prince drove out the foreigners and brought back the deity. Three times it has been buried in the Chilka Lake; and whether the invaders were pirates from the sea or the devouring cavalry of Afghānistān, the first thing that the people saved was their god. The true source of Jagannāth's undying hold upon the Hindu race consists in the fact that he is the god of the people. The poor outcast learns that there is a city on the far eastern shore, in which priest and peasant are equal in the presence of the "Lord of the world." In the courts of Jagannāth and outside the Lion Gate thousands of pilgrims every year join in the sacrament of eating the holy food, the sanctity of which overleaps all barriers of caste, for a Puri priest will receive food even from a low caste Hindu. The worship of Jagannāth aims at a catholicism which embraces every form of Indian belief and every Indian conception of the deity. He is Vishnu under whatever form and by whatever title men call upon his name. The fetichism of the aboriginal races, the nature worship of the Vedas, and the lofty spiritualism of the great Indian reformers, have alike found refuge here. Besides thus representing Vishnu in all his manifestations, the priests have superadded the worship of the other members of the Hindu trinity in their various shapes, and the disciple of every Hindu sect can find his beloved rites and some form of his chosen deity within the sacred precincts.

It has been supposed that the worship of Jagannāth is an adaptation by the Brāhmaṇs of some Buddhist cult. Puri probably was originally the place where the famous tooth relic of Buddha was worshipped; and it is noticeable that the wooden image of Jagannāth contains a certain article, about which the priests maintain perfect silence, and which is never replaced by another new piece, whenever the image is renewed. The crude form of the images of Jagannāth, his brother Balaram and his sister Subhadrā, with their round shapeless heads and their arms represented by stumps only, strangely resembles the Buddhist symbol of a wheel supported by a *trishala* or trident. The abolition of caste rules in regard to the *mahāprasād* or

the sacred food cooked in the temple recalls the protest of Buddhism against caste prejudices. In some modern representations of the ten incarnations of Vishnu the place of the ninth or Buddha incarnations (*avatar*) is occasionally occupied by the figure of Jagannāth.

The temple appears to have been built by king Ohoda Ganga in the second half of the 12th century, not, as tradition has it, by Ananga Bhima. It soon becomes famous, and the devotion of centuries has made Jagannāth a very wealthy god; the income was estimated in 1877 at more than 7 lakhs though the temple authorities deny that it reaches anything like so high a figure and allege that it is only a little over one lakh. The immediate attendants on the god are divided into 36 orders and 97 classes, at the head of whom is the Rājā of Khundā, the representative of the ancient royal house of Orissa, who takes upon himself the lowly office of sweeper to Jagannāth. Decorators of the idol, priests of the wardrobe, cooks, dancing girls, grooms, and artisans of every sort follow. A special department keeps up the temple records, and affords a literary asylum to a few learned men.

The sacred enclosure is nearly in the form of a square, 652 feet long and 630 broad. The interior is protected from profane eyes by a massive stone wall 20 feet high. Within rise about 120 temples dedicated to the various forms in which the Hindu mind has imagined its god. But the great pagoda is the one dedicated to Jagannāth. Its conical tower rises like an elaborately carved sugar-loaf, 192 feet high and surmounted by the mystic wheel and flag of Vishnu. Outside the principal entrance, or Lion Gate, in the square where the pilgrims chiefly throng is an exquisite monolithic pillar, which stood for centuries before the temple of the sun at Konārak. The temple of Jagannāth consists of 4 chambers, communicating with each other, viz., the hall of offerings; the pillared hall for the musicians and dancing girls; the hall of audience; and lastly the sanctuary itself, containing rude images of Jagannāth, his brother Balabhadra and his sister Subhadra. The service of the temple consists partly in a daily round of oblations, and partly in sumptuous ceremonies at stated periods throughout the year. The offerings are bloodless, but nevertheless within the sacred enclosure is a shrine to Bimalā, the stainless queen of the All-Destroyer, who is annually adored with bloody sacrifices.

Twenty-four festivals are held, consisting chiefly of Vaishnavite commemorations, but freely admitting the ceremonials of other sects. The car festival, which takes place in June or July, is the great event of the year. The great car is 45 feet in height and 35 feet square, and is supported on 16 wheels of 7 feet diameter. The brother and sister of Jagannāth have separate cars a few feet smaller. When the sacred images are at length

brought forth and placed upon their chariots, thousands fall on their knees and bow their foreheads in the dust. The vast multitude shouts with one throat, and surging backwards and forwards, drags the wheeled edifices down the broad street towards the country house of the god. Music strikes up before and behind, drums beat, cymbals clash, the priests harangue from the cars and singers engaged for the purpose chant coarse songs to induce the crowd to pull vigorously. The distance from the temple to the country house is about a mile, but as the heavy structures have no contrivance to guide them and the wheels sink into the sand which in some places covers the road, the journey sometimes takes several days. The cars are dragged from the temple to the country house by the assembled pilgrims and by some of the towns-people who hold revenue-free lands granted to them as remuneration for the work; when the pilgrims are insufficient to drag the cars back, coolies are also engaged from the neighbouring villages. In 1904, the pilgrims alone pulled the cars to the country house in 4 hours and brought them back again to the temple without such assistance. In a closely packed eager throng of a hundred thousand men and women, many of them unaccustomed to exposure or labour, and all of them tugging and straining at the cars to the utmost under a blazing sun, deaths must occasionally occur. At one time several people were killed or injured every year, but these were almost invariably the result of accidental trampling. The few cases of suicide that did occur were for the most part those of diseased and miserable objects, who took these means to put themselves out of pain. The official returns place this beyond doubt. Nothing, indeed, could be more opposed to the spirit of Vishnu-worship than self immolation. Accidental death within the temple renders the whole place unclean.

The *pāndās* employ a body of emissaries called pilgrim guides, numbering about 3,000 men, who wander from village to village within their allotted beats, preaching pilgrimage as the liberation from sin; they travel through India in this way enlisting pilgrims and receive a commission for so doing. Nothing can exceed the liberality of the pilgrims to their spiritual guides, but it is to be feared that this liberality is preyed upon, and that many pilgrims are in a state of destitution before the time comes for them to turn their backs upon the holy city and set their faces once more homewards. In 1902 a fund was started for the relief of destitute pilgrims. It has now been placed on a permanent basis and is managed by a committee of 5 non-official and 3 official members. The District Magistrate is the president of the committee; Government makes an annual grant equal to the amount that is raised by subscriptions and donations, subject to a maximum of Rs. 1,000 a year. The object of the fund is to afford relief to destitute

pilgrims, especially in the shape of travelling and diet expenses, and thus enable them to return to their homes with safety.

The town contains several ancient tanks, which are regarded as *tirthas* or sacred places and in which the pilgrims bathe from religious motives. On its western outskirts at a distance of about 2 miles from the Great Temple stands the sacred temple of Loknāth or Lord of Regions. The divinity is held in very great esteem by the people of the District and the place is largely visited. [Sir W. W. Hunter, *Orissa*, vol. i, pp. 81-167.]

Satyabādī.—Village in the Khurdā sub-division of Puri District, Bengal, situated in 19° 57' N. and 85° 49' E. Population (1901) 1,547. It contains a shrine dedicated to Śākhī Gopāl, an incarnation of Krishna which is visited by all pilgrims going to Puri.

Udayagiri.—Sandstone hill in the Khurdā sub-division of Puri District, Bengal, situated in 20° 16' N. and 85° 47' E. See **KHANDGIRI**.

Cross-references (for Imperial Gazetteer only).

Amrāvati.—Hill in Outtack District, Bengal. See **CHATIA**.

Bhubaneswar.—Temple city in Puri District, Bengal. See **BHUBANESWAR**.

Chandbally.—Port in Balasore District, Bengal. See **CHANDBALLI**.

Jagannāth.—Temple in Puri town, Puri District, Bengal. See **PURI TOWN**, which is also called Jagannāth.

Jellasure.—Village in Balasore District, Bengal. See **JALESWAR**.

Kanarak.—Temple in Puri District, Bengal. See **KONARAK**.

Kandhmāls.—Sub-division in Angul District, Bengal. See **KHONDMAIS**.

Katak.—District, sub-division and town in Bengal. See **OUTTACK**.

Khonds.—Tribe in Bengal. See **KHONDMAIS**.

Pooree.—District, sub-division and town in Bengal. See **PURI**.



